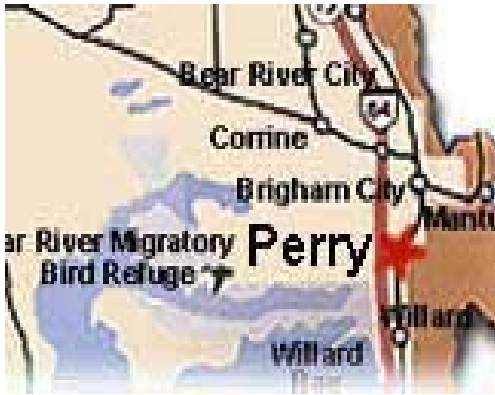


Perry City

Transportation Master Plan



DRAFT REPORT
2004

Prepared By
UDOT Planning Section
4501 South 2700 West
Salt Lake City, Utah 84114-3600



State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

DEPARTMENT OF TRANSPORTATION

JOHN R. NJORD, P.E.
Executive Director

CARLOS M. BRACERAS, P.E.
Deputy Director

May 3, 2005

Mayor Ed Skrobiszewski
Perry City
3005 South 1200 West
Perry, Utah 84302

Dear Mayor Mayer:

Attached is a *Final* copy of the Perry City Community Transportation Plan (CTP). The CTP is a tool to help guide transportation decisions for your community, which will help meet the transportation visioning discussed during the public meetings held October 6th and 7th, 2004.

Many projects were identified during the public meetings, and local priorities established for several projects while developing the CTP. This project list will help the city develop an improvement program addressing your unique transportation issues. We are forwarding projects and comments for the state highway system, which are highway operations based, to the appropriate Utah Department of Transportation (UDOT) Regional Office so they may be addressed as priorities allow. In the meantime, UDOT will be using the list of projects identified for State Routes in our Long Range Planning Process. The Statewide Long Range Transportation Plan (LRP) identifies needs on the state highway system, from which projects are selected to be included in our Statewide Transportation Improvement Plan (STIP).

It is important to restate that a CTP is a living document that changes as your City changes. We encourage you to revise the CTP as frequently as necessary to meet Perry City's needs.

Thank you again for allowing us to help develop your Community Transportation Plan. We always value public input regarding the state highway system. Your Community has provided us valuable insight for our Statewide Long Range Planning Process.

Sincerely,

John Quick, P.E.
Engineer for Transportation Planning

Encl

Perry City

Transportation Master Plan

Mayor Ed Skrobiszewski

City Council Cory Bennion
Boyd Malan
Bruce Howard
Ben Ashcroft
Jon Rackham

City Engineer O. Neil Smith

Street Supervisor Paul Nelson

Police Chief Craig Gunn

Table of Contents

1. Introduction

- 1.1. Background
- 1.2. Study Need
- 1.3. Study Purpose
- 1.4. Study Area
- 1.5. Study Process

2. Existing Conditions

- 2.1. Land Use
- 2.2. Environmental
- 2.3. Socio-Economic
- 2.4. Functional Street Classification
- 2.5. Bridges
- 2.6. Traffic Counts
- 2.7. Traffic Accidents
- 2.8. Bicycle and Pedestrian
 - 2.8.1. Biking/Trails
 - 2.8.2. Pedestrians
- 2.9. Public Transportation
- 2.10. Freight
- 2.11. Aviation Facilities and Operations
- 2.12. Revenue
 - 2.12.1. State Class B and C Program
 - 2.12.2. Federal Funds
 - 2.12.3. Local Funds
 - 2.11.4 Private Sources

3. Future Conditions

- 3.1. Land Use and Growth
 - 3.1.1. Population and Employment Forecasts
 - 3.1.2. Future Land Use

3.2. Traffic Forecast

4. Planning Issues and Guidelines

4.1. Guidelines and Policies

4.1.1. Access Management

4.1.1.1. Definition

4.1.1.2. Access Management Techniques

4.1.1.3. Where to Use Access Management

4.1.2. Context Sensitive Solutions

4.1.3. Recommended Roadway Cross Sections

4.2. Bicycles and Pedestrians

4.2.1. Bicycles/Trails

4.2.2. Pedestrians

4.3. Enhancement Program

4.4. Transportation Corridor Preservation

4.4.1. Definition

4.4.2. Corridor Preservation Techniques

4.4.2.1.Acquisition

4.4.2.2.Exercise of Police Powers

4.4.2.3.Voluntary Agreements and Governmental Inducements

4.5. Site Distance

5. Transportation Improvement Projects

5.1. Current State Transportation Improvement Program (STIP)

5.2. Recommended Projects

5.3. Revenue Summary

5.3.1. Federal and State Participation

5.3.2. City Participation

5.4. Other Potential Funding

FIGURES, CHARTS & TABLES

FIGURES

- F1-1** STUDY AREA MAP
- F1-2** STUDY VICINITY MAP
- *F2-1** ZONING MAP
- F2-2** FUNCTIONAL CLASSIFICATION MAP
- F2-3** BRIDGE SUFFICIENCY MAP
- F2-4** STATE ROADS CRASH RATES MAP
- F3-1** AVERAGE ANNUAL DAILY TRAFFIC YR 2002; YR 2030
- F4-1** SUGGESTED TYPES OF CROSS-SECTIONS

CHARTS

- C2-1** POPULATION
- C2-2** DECENIAL POPULATION CHANGE
- C2-3** POPULATION GROWTH RATE
- C2-4** EMPLOYMENT GROWTH RATE
- C2-5** EMPLOYMENT OCCUPATION SECTORS
- C2-6** ANNUAL AVERAGE TRAFFIC
- *C2-7** MONTHLY ADT
- *C2-8** DAILY ADT
- *C2-9** HOURLY ADT

TABLES

- T2-1** BRIDGE SUFFICIENCY RATINGS
- T2-2** AVERAGE ANNUAL DAILY TRAFFIC
- T2-3** CRASH DATA
- T5-1** TRANSPORTATION NEEDS & COST ESTIMATES

** If available for this study*

1. Introduction

1.1. Background

Perry is located in eastern Box Elder County, directly south of Brigham City. The Bear River Valley, in which Perry is located, is one of the prime agricultural areas of northern Utah. Perry is bordered on the east by the Wasatch Mountains and on the west by the shoreline of the Bear River Migratory Bird Refuge. The town consists of an area of about nine square miles with a population (in 2000) of 2,283.

In 1851, the same year that Box Elder (now Brigham City) was being settled, Orrin Porter Rockwell and his brother Merritt laid claim to some land lying about 2.5 miles southwest of the center of Box Elder settlement. It was adjacent to a large spring known to this day as Porter Spring. The Rockwells made no improvements on their land, although they claimed it for a number of years. One reason they never occupied the land may have been the danger of Indian raids; Porter Spring was a great camping place for both emigrants and Indians in those days.

Early in the spring of 1853, Mormon pioneers began to settle in the area. William Plummer Tippetts and his family, along with Lorenzo and May Wray Perry, and Gustavus Perry and his family, laid claim to land in what became the center of town. Thomas C. Young Sr., Robert Henderson, and Alexander Perry settled to the north of the Tippetts and Perrys.

Three Mile Creek was the name given to early-day Perry, as it was just three miles from the center of Box Elder to the small stream which furnished water for the settlers.

While surrounding communities were building forts to protect themselves from the Indians, the residents of Three Mile Creek made friends with the Indians, who would bring wild game and trade it for what was called "white face bread." They taught the settlers to cure and tan deer hides to make coverings for their feet.

There was a small settlement of Welsh immigrants midway between Three Mile Creek and Brigham City. Among the first settlers of the area were Benjamin Jones, Kidwalendar Owens, David Peters, Thomas Mathias, and John Roberts. They chose to meet with those living in Box Elder until 1868 when the two communities joined together and organized a Sunday School.

The first brick school building in Box Elder County was built in Perry in 1874. It was erected ostensibly for a meetinghouse, but was used for school purposes also. In 1899 a new meetinghouse was erected, a two-story building 32 by 60 feet with a tower and large double doors on the west. The building was constructed under the direction of Bishop James Nelson at a cost of \$5,000. This building has had several additions, and when a new LDS meetinghouse was built in 1974-75 it was sold to a theatrical group and is now home to the Heritage Theater. Live productions delight people throughout northern Utah each month.

From the beginning, lack of water kept back the growth of Three Mile Creek, as there was much more land than water to irrigate it. In the fall of 1894 a reservoir was partially completed at the head of Three Mile Creek Canyon. Before the project was completed, however, frost stopped the work and winter set in. The next year no work was done to finish the dam; but because it was a low water year, nothing happened.

In June 1896 a rainstorm that occurred before the snow was all melted caused a heavy flow of water into the reservoir which resulted in a terrible flood. Homes were lost and farms were covered with mud, gravel, and debris, but no lives were lost. In 1923 a series of cloudbursts caused a second flood; however, damage was not quite as great that time.



When the railroad passed through the western part of Three Mile Creek in 1868-69, it brought much-needed revenue to the residents, who hauled timber and telegraph poles from the canyon. Some men made as much as thirty dollars a day. The railroad also paid high prices for goods. Hay sold for fifty dollars a ton, and grain, eggs, and butter were also very much in demand.

In May 1898 the name of Three Mile Creek was changed to Perry in honor of O.A. Perry, who had served as an LDS bishop for almost twenty years.

Population of the town at the turn of the century was 261 (50 families).

In the spring of 1905, residents of Perry built their own electric company, with Vinson F. Davis as president. They erected their own poles and strung the wires. The company was purchased by the town in 1912 and it was sold to Utah Power and Light Company in 1950.

Water, or the lack of it, continued to be a major problem. In 1902 the Three Mile Creek Irrigation Company decided to pipe water from the mouth of the canyon to the settlement for irrigation purposes. When the Pine View Canal later was built from Ogden to Brigham City, farmers were able to increase their orchards and plant row crops, and hundreds of acres of arid land were reclaimed. A culinary water system providing water to each home in Perry was put into operation in 1911. The water came from mountain springs and later from wells. The town was incorporated in 1911.

Agriculture, consisting primarily of family dairies and fruit orchards, was the leading industry in Perry. A creamery was built at the Barnard White farm, and in 1910 a cannery was established to can local peas, tomatoes, carrots, and beets. Facilities were also set up to ship the excellent fruit grown in the region to all parts of the United States. This provided work to those in the community and surrounding areas.

A nursery was established on forty acres in the southwest part of Perry, growing and grafting to make a better variety of fruit trees. In 1909 the number of trees in the nursery reached a half million, supplying trees for many orchards in the area.

Population in 1958 was 500. At that time increased Perry City growth began, orchards giving way to housing areas, and dairy farms becoming fewer in number. The character of the town changed from a rural community to a suburban community whose residents commuted to Ogden, Brigham City, Thiokol, and other areas for employment. With this growth, the small three-room schoolhouse built in about 1910 was enlarged in 1961. Six added classrooms along with a multipurpose room and kitchen helped make it a modern school.

Perry City today is a progressive community, looking to the future in its development. The city has three parks, one with baseball diamonds and a bowery, one with a children's play area and small boweries, while the third is a nature park with small baseball diamond, a horse riding arena, and, in the winter, an ice skating rink. Perry is also home to Maddox Ranch House, which is known throughout Utah for its fried chicken and steak dinners.

This historical overview was provided from www.onlineutah.com, in an article written by Lois J. Nelson.

1.2. Study Need

The Perry City has seen a increase of 96.78% in population within the last decade and just over a 11.71% population increase the decade before. From 1960 to 2000, the population has increased 406%. Population in the Perry City area has gone through cyclical changes, but the overall trend shows very consistent increase in the population. There have been discussions of Thiokol increasing employment due to the greater demand and the war efforts. These events may stimulate future growth in this area. A well-established transportation plan is needed to provide direction for continual maintenance and improvements to Perry City's transportation system.

Perry City has an adopted General Plan. The Perry City General Plan briefly describes the transportation needs of this area. With the aging infrastructure of Perry's transportation system and the need for system improvements, a more extensive transportation plan is necessary for Perry City and the surrounding area.

Some of the major transportation issues around the State are as follows:

- Safety
- Railroad crossings
- Trails (bicycle, pedestrian, & OHV)
- Signals
- City interchange aesthetics
- Connectivity of roadways
- Property access
- Truck traffic
- Alternate routes
- Speed limits

Perry City recognizes the importance of building and maintaining safe roadways, not only for the auto traffic but also for pedestrians and bicyclists.

1.3. Study Purpose

The purpose of this study is to assist in the development of a transportation master plan for Perry City. This plan could be adopted by Perry City as a companion document to the city's General Plan. With the transportation master plan in place the city can qualify for grants from the State Quality Growth Commission.

The primary objective of the study is to establish a solid transportation master plan to guide future developments and roadway expenditures. The plan includes two major components:

- Short-range action plan
- Long-range transportation plan

Short-range improvements focus on specific projects to improve deficiencies in the existing transportation system. The long-range plan will identify those projects that require significant advance planning and funding to implement and are needed to accommodate future traffic demand within the study area.

1.4. Study Area

The study area includes Perry City, and land adjacent to it that is in Box Elder County. A general location map is shown in Figure 1-1. A more detailed map of the study area and city limits is shown in Figure 1-2. The study area was developed by Perry City and approved by the Perry City Transportation Master Plan Technical Advisory Committee.

The roadway network within the study area includes I-15, US-89, US-91, & SR-315. Each of these roadways provides a vital function to Perry City, to the rest of Box Elder County and to the State of Utah. I-15 connects all points north and South including Salt Lake City and the Utah/Idaho State Line. I-15 also connects to I-84 just to the North. I-15 is also a regional commuter and commercial trucking route. US-91 connects areas to the East from I-15 including an important route to the Cache Valley and the City of Logan. US-89 connects the area to the South. This route is important as it provides an emergency route in times when I-15 is not available. SR-315 serves the community of Willard and provides another access between I-15 and US-89. These roadways along with the local road network are shown in Figure 2.



1.5. Study Process

The study, which began in September 2004, is proceeding as a cooperative effort between Perry City, UDOT, and local community members. It is being conducted under the guidance of Perry City Officials. The following individuals participated in the initial meetings to provide input used to create this document. This group listed below will be referred to as the Technical Advisory Committee or “TAC” for this document.

Ed Skrobiszewski	Mayor, Perry City
Judy Bylsma	City Recorder, Administrator
Bruce Howard	City Council
Boyd Malan	City Council
Jon Rackham	City Council
Matt McBride	Planning Commission
Newell Francis	Planning Commission
Todd Whitaker	Police Department
Paul Nelson	Streets/Water Superintendent
L. Edward Johnson	Parks and Zoning
Boyd Montgomery	Board of Adjustments
Everett Reynolds	Board of Adjustment
Scott Maltby	Perry City Police Department
Lori Morris	Perry City School
Jeff Young	Geneva Rock Products – Business Manager
Lani Braithwaite	Resident
Jerry Capener	Resident
Dianne Curtis	Resident
Robert Duke	Resident

Deborah Everett	Resident
Ginger Issacson	Resident
Tim Kelly	Resident
Roger Kelly	Resident
Evan Kindred	Business Owner
Suresh Kulkarni	Property Owner
Ralph Nielson	Property Owner
Earl Pannebaker	Resident
Tom Shaw	Resident
Donald Thompson	Resident
Cory Wilkes	Business Owner – Brigham City
Rick Whitaker	Business Owner – Brigham City
Keith Lemon	Resident
Jack Francis	Business Owner
Andrew Neff	UDOT Region Public Involvement Coordinator
Charles Mace	UDOT Region One Project Manager
Eric Rasband	UDOT Transportation Planner
Robert Pelly	UDOT Transportation Planner
Paul Vidmar	UDOT Transportation Planning Engineer
Dan Kuhn	UDOT Rail Freight Planner
Sandy Weinrauch	UDOT Planning Public Involvement Coordinator

Figure 1-1: Perry City Study Area Location

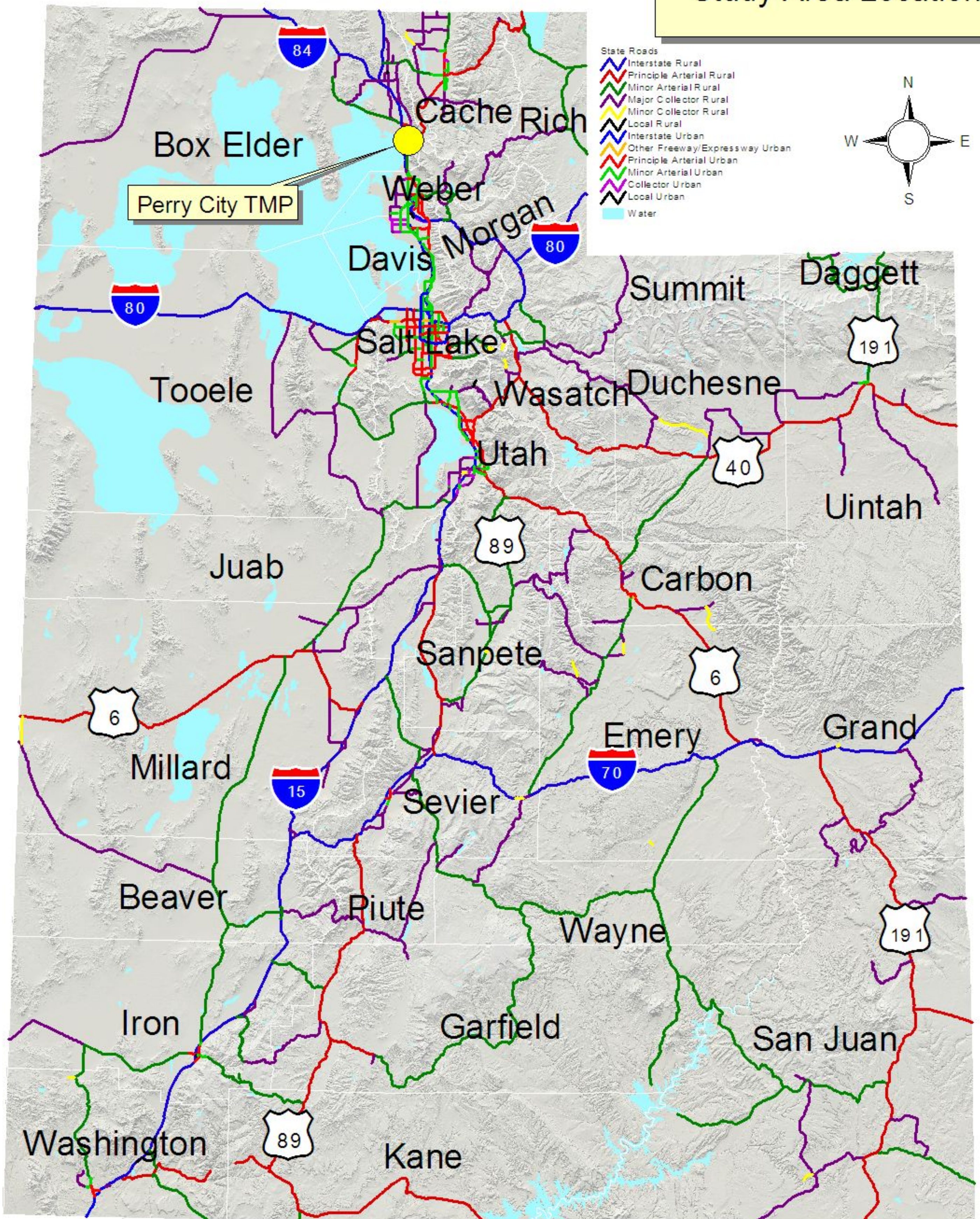
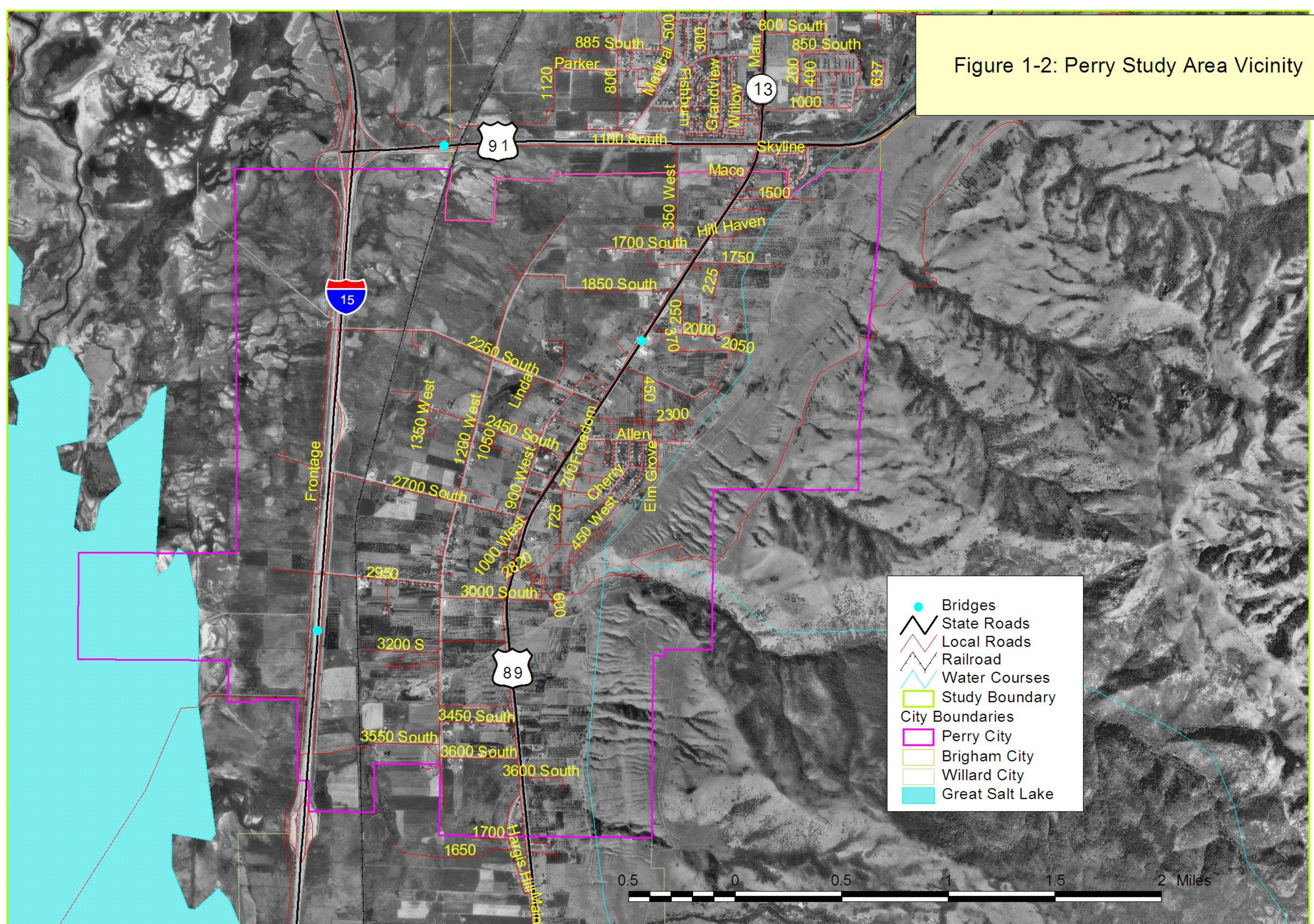


Figure 1-2: Perry Study Area Vicinity



The study process for the Perry City Transportation Master Plan consist of three basic parts: (1) inventory and analysis of existing conditions, (2) project future conditions, and (3) development of a transportation master plan (TMP). This process involves the participation of the TAC for guidance, review, evaluation and recommendations in developing the TMP to include development of future projects for the identified study area.

The TAC will evaluate each part of the study process. Their comments will be incorporated into the study's draft final report. The remainder of the draft final report will focus on the recommendation and implementation portion of the transportation plan program. Transportation projects that will be recommended for the short-term and long-range needs will be developed based on the TAC's recommendations and concurrence.

The study process allows for the solicitation of input from the public at two TAC workshops. This public participation element is included in the study process to ensure that any decisions made regarding this study are acceptable to the community.

The first TAC workshop will provide an inventory and analysis of existing conditions and identify needed transportation improvements. The second TAC workshop will focus on prioritizing projects, estimating costs, and discussion of the funding processes.

The TAC is expected to recommend those comments that are to be incorporated into the report and applicable to the goals of this study. The draft final report and the final report will be submitted to the City for review and comments.

Upon local review of the draft report, UDOT will prepare appropriate changes and submit the final report to the City for approval. The final report will describe the study process, findings and conclusions, and will document the analysis of the recommended transportation system projects and improvements.

2. Existing Conditions

An inventory and evaluation of existing conditions within the study area was conducted to identify existing transportation problems or issues. The results of the investigation follow.

2.1. Land Use

In order to analyze and forecast traffic volumes, it is essential to understand the land use patterns within the study area. The Perry City General Plan outlines land use classifications and annexation plans. Much of the City is zoned Residential, but there are also many issues dealing with commercial and industrial properties.

The Perry City Zoning map follows on the next page.

2.2. Environmental

In Utah there are a variety of local environmental issues. Each of the cities and counties need to look at what are the environmental issues in their areas on a case-by-case basis. There are many resources that can help local entities to determine what issues need to be addressed and how any problems that may exist can be resolved.

Some of the environmental concerns around the State are wetlands, endangered species, archeological sites, and geological sites among other issues. Environmental concerns should be addressed when looking at an area for any type of improvement to the transportation system. Specific issues mentioned in the Perry City General Plan are existing & potential natural hazards, utilization of hazardous areas, toxic waste in new industry, and collection of old automobiles & farm equipment. Protecting the environment is a critical part of the transportation planning process.

2.3. Socio-Economic (Census Brief: Cities and Counties of Utah, May 2001)

Perry City ranks 93rd for population, in the State of Utah, out of 235 incorporated cities and towns. Historical growth rates have been identified for this study, because past growth is usually a good indicator of what might occur in the future. Chart 2-1 identifies the population growth over the past 50 years for the State of Utah, Box Elder County and Perry City. Chart 2-2 identifies that population change in Perry City has ranged from 11.72% between 1980 and 1990 to gaining 96.78% between 1990 and 2000, while growth in the State has gained between 18 and 38 percent during the past 50 years.

PERRY CITY, UTAH BOX ELDER COUNTY

ZONING MAP SEPTEMBER 2004

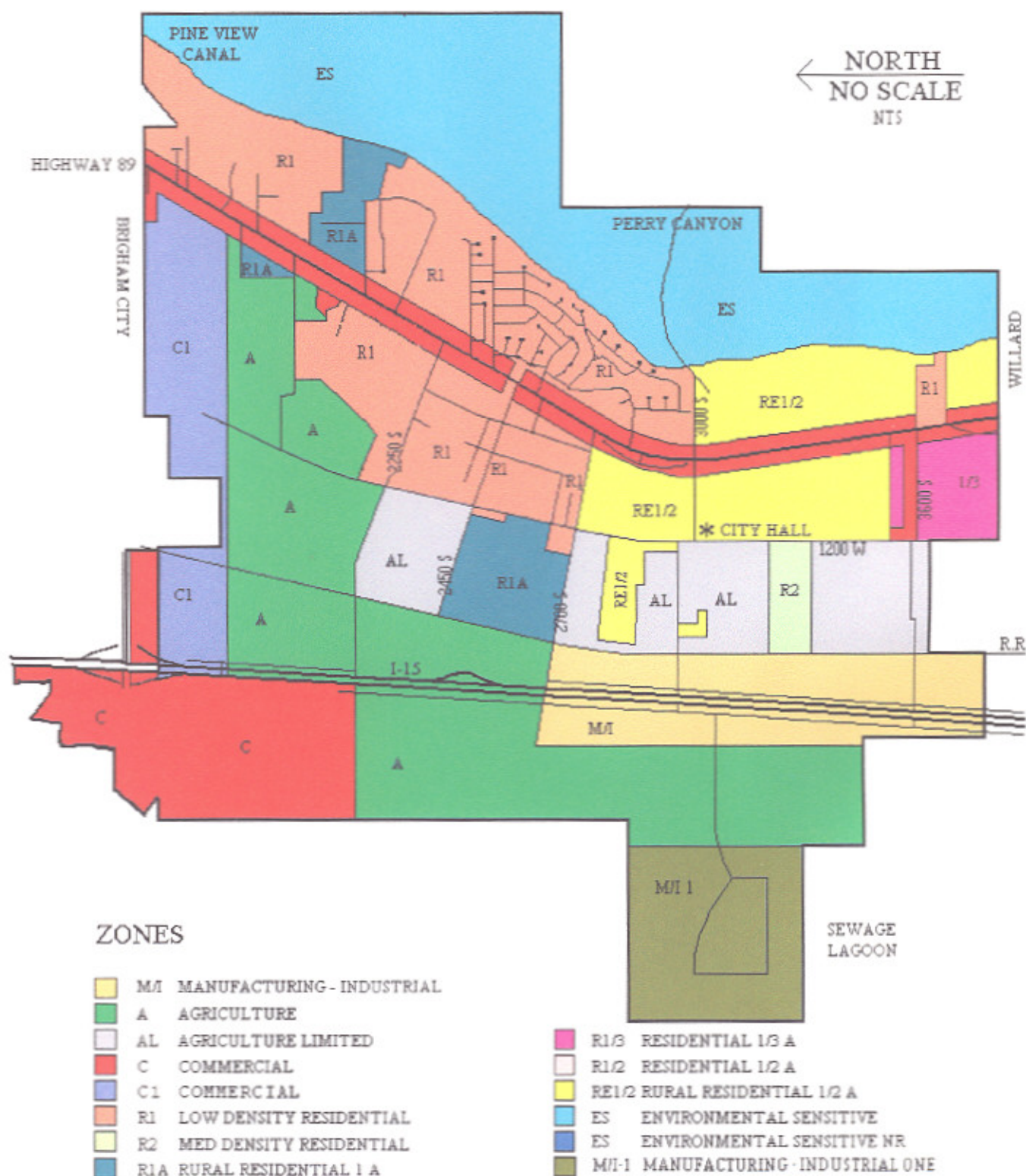
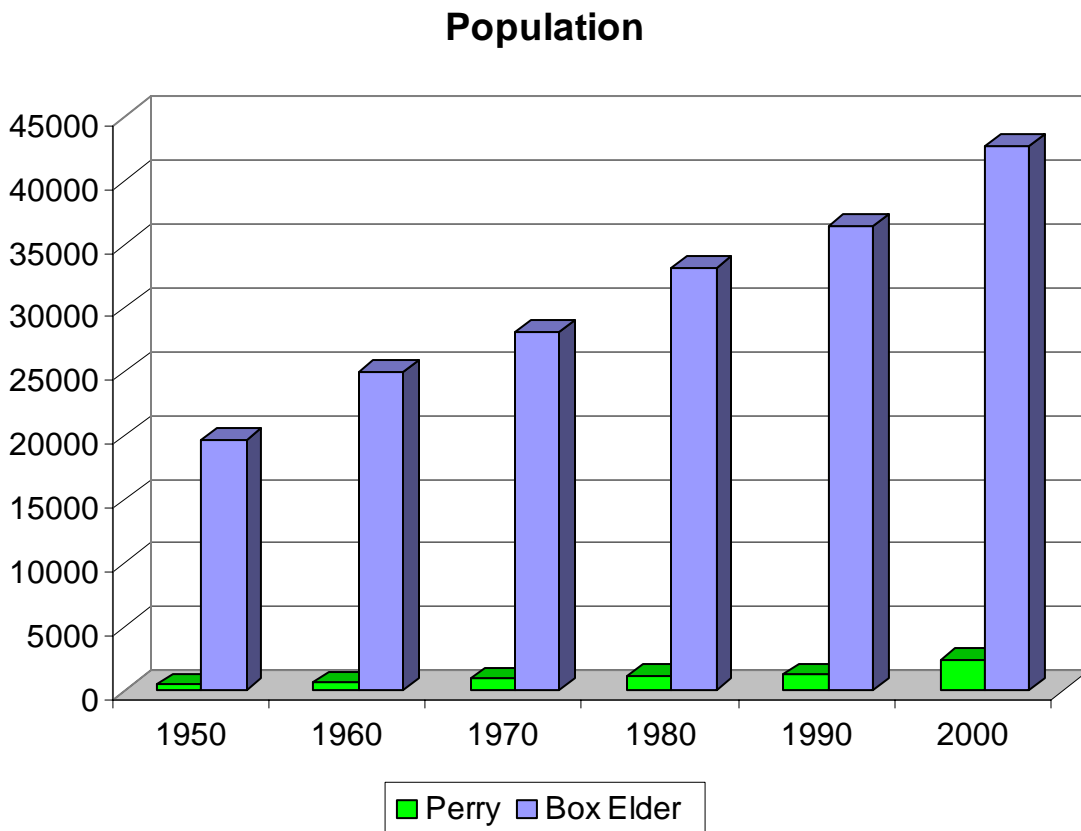


Chart 2-1. Population Data

Year	Population		
	Utah	Box Elder County	Perry City
1950	688,862	19,734	449
1960	890,627	25,061	587
1970	1,059,273	28,129	909
1980	1,461,037	33,222	1,084
1990	1,722,850	36,485	1,211
2000	2,233,169	42,745	2,383



Source: U.S. Bureau of the Census

<http://www.governor.utah.gov/dea/OtherPublications.html>

Chart 2-3 identifies yearly population growth rates for the State of Utah and Box Elder County.

Though the State population has grown every decade from 1950 until 2000, Box Elder County has also showed a slower, yet consistent, rate of growth in population over the same period.

Perry City has some unique demographic characteristics when compared with the State, particularly with age demographics. In the 25 to 54-age category, the State is at 38.6% the County is at 35.7% and the City is at 37.6%. For the 65+-age category, the State is at 8.5%, the County is at 10.4% and the City is at 10.2%. The State's median age is 27.1 years and the County's median age is 28.0 years, City's median age is 30.1 years. Another interesting statistic is that of Veteran status with State at 10.7%, County at 11.4%, and Perry City at 13.6%.

The 2000 median household income in Perry City is \$52,500, compared to the State median household income of \$45,726.

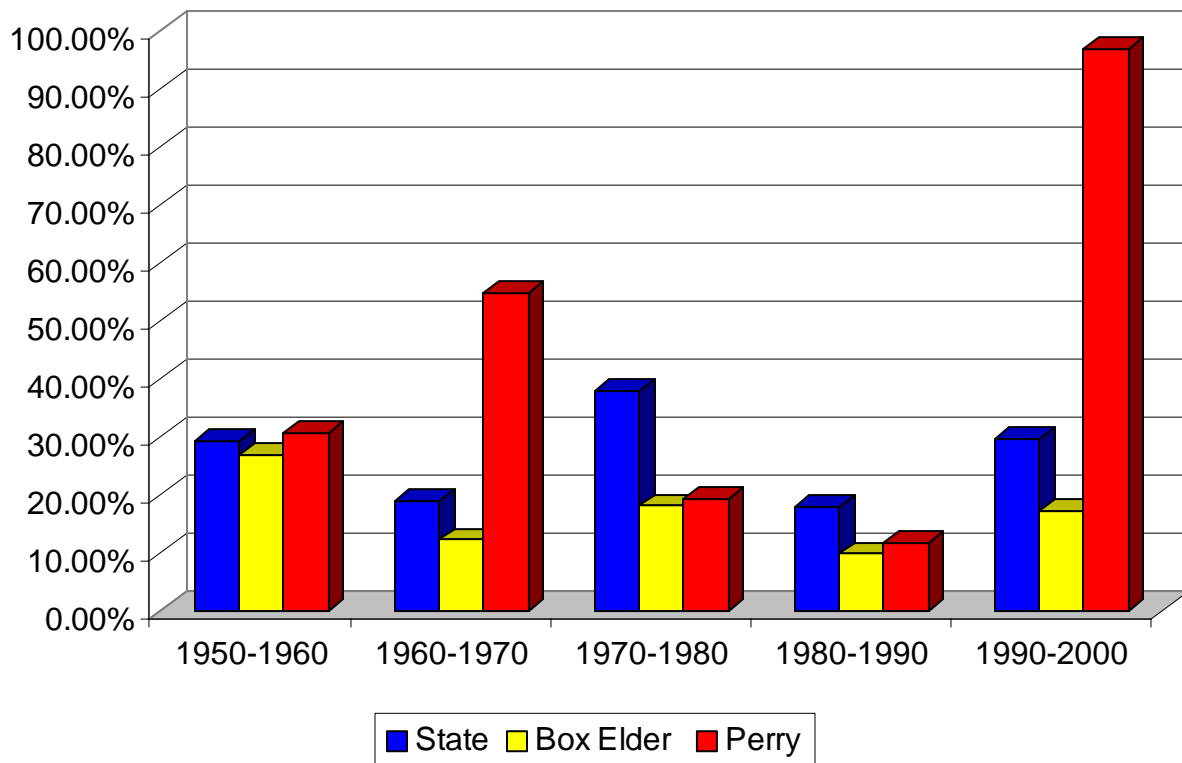
The unemployment rate in Perry City was 2.7 percent in 2000. Due to Perry City's large reliance on manufacturing jobs, the city has had larger rates of unemployment especially throughout the 90's, slightly greater than that of the State. According to the Utah Department of Employment Security (UDES), in 2000 there were approximately 1,049 employed people in Perry City or 63.8% of the population. The city has 45 unemployed people, which is 2.7% of the population. There are 18,298 employed people in Box Elder County or 62.5% percent of the population. The county has 1,013 people unemployed, which is 3.5% of the population.

The majority of employees in Box Elder County work in three primary employment sectors: Manufacturing, Trade and Government as shown in Chart 2-5. In the county, these sectors make up 58.61% of the labor force. Another interesting note was that housing built from 1990-2000 were 57.4% of total for Perry City compared to 25% for the state. Also homes built before 1939 were 6.4% of the total for Perry City with 10% for the state.

Chart 2-2. Population Change Data

Decade	State of Utah	Box Elder County	Perry City
1950-1960	29.29%	26.99%	30.73%
1960-1970	18.94%	12.24%	54.86%
1970-1980	37.93%	18.11%	19.25%
1980-1990	17.92%	9.82%	11.72%
1990-2000	29.62%	17.16%	96.78%

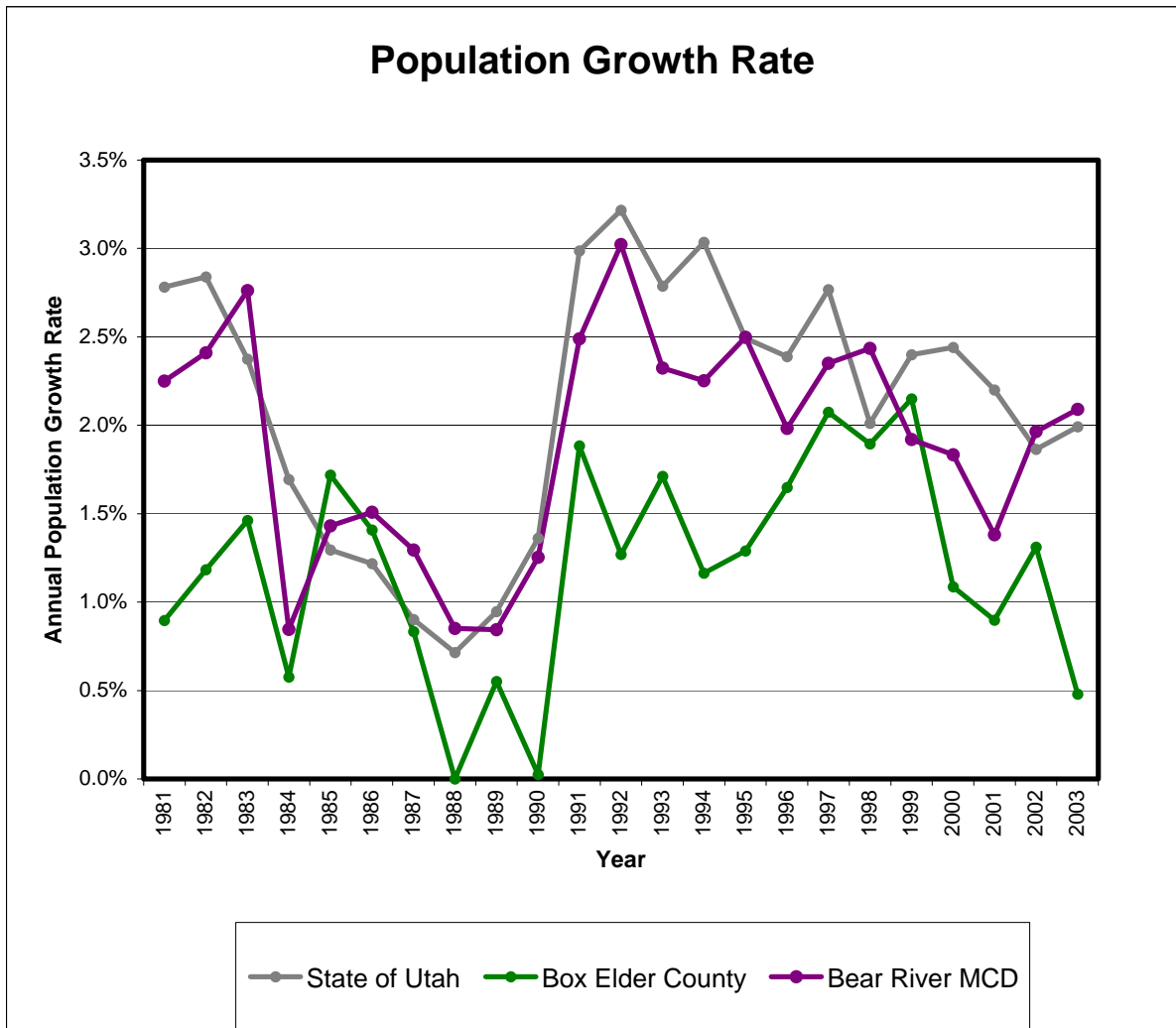
Decennial Population Change



Source Data: U.S. Bureau of the Census

<http://www.governor.utah./dea/OtherPublications.html>

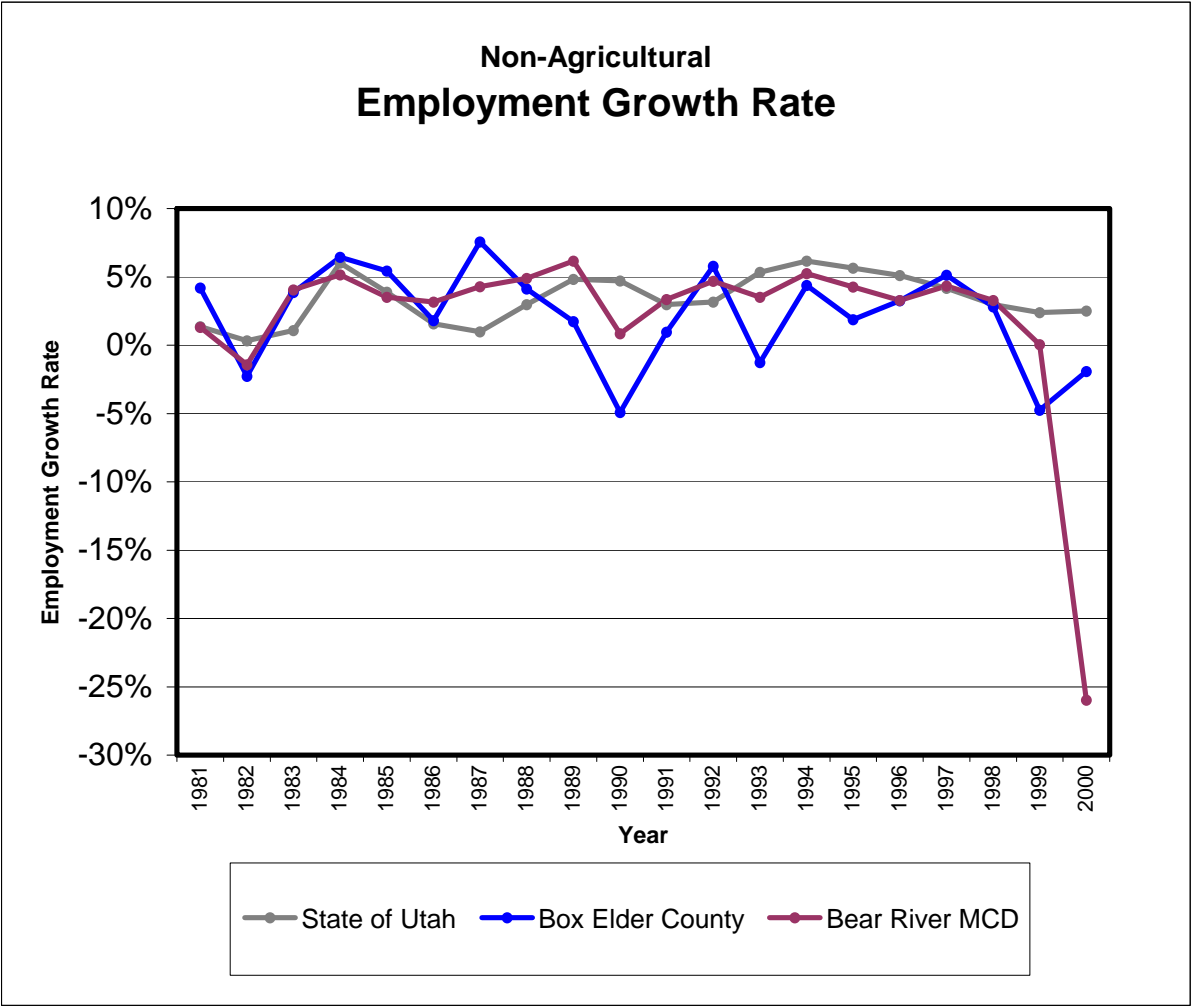
Chart 2-3. Population Growth Rate (1980-2000)



MCD = Multi-County Districts, Bear River MCD = Box Elder, Cache & Rich Counties

Source: Governors Office of Planning and Budget
<http://www.governor.utah.gov/dea>

Chart 2-4. Employment Growth Rate (1980-2000)



MCD = Multi-County Districts, Bear River MCD = Box Elder, Cache & Rich Counties

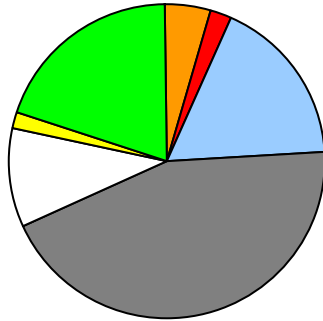
Source: Governors Office of Planning and Budget
<http://www.governor.utah.gov/dea>

Chart 2-5. Employment Sectors (1980-2000)

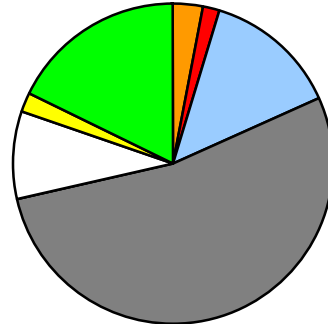
Sector	1980	1990	2000	$\Delta\%$ 1980-2000
Construction	4.68%	3.05%	5.47%	79.52%
FIRE	2.24%	1.72%	2.15%	46.92%
Government	17.58%	13.79%	13.50%	17.86%
Manufacturing	44.35%	53.27%	43.96%	52.15%
Mining	0.07%	0.09%	0.18%	300.00%
Services	10.54%	9.00%	11.82%	72.09%
TCPU	1.68%	1.93%	2.45%	123.59%
Trade	20.22%	17.88%	21.12%	60.32%

FIRE = Finance, Insurance & Real Estate
 TCPU = Telecommunications & Public Utilities

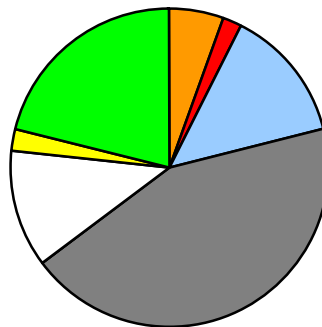
1980 Employment Sectors



1990 Employment Sectors



2000 Employment Sectors



Source: Governors Office of Planning and Budget
<http://www.governor.utah.gov/dea/HistoricalData.html>

2.4. Functional Street Classification

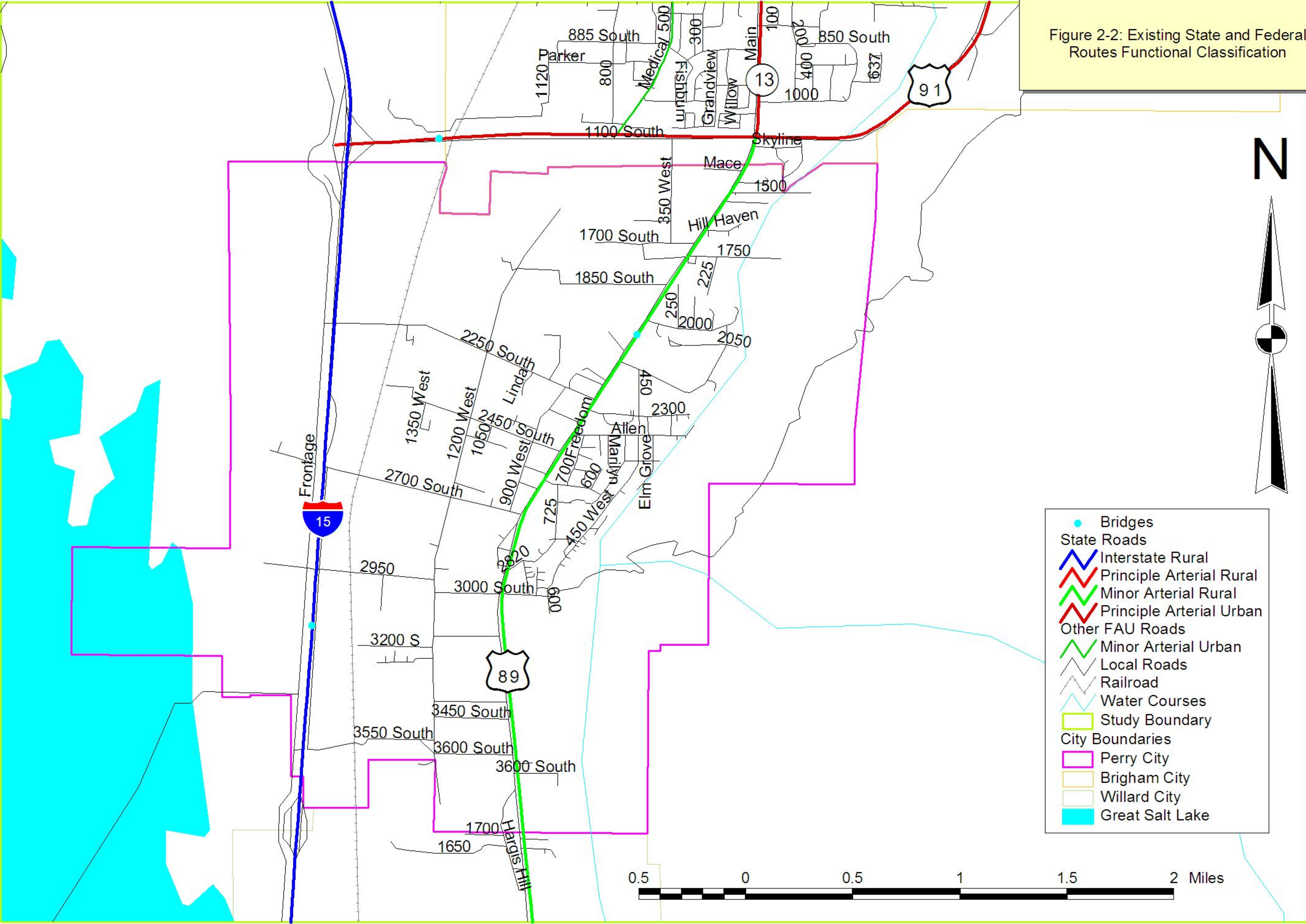
This document identifies the current function and operational characteristics of the selected roadway network of Perry City. Functional street classification is a subjective means to identify how a roadway functions and operates when a combination of the roadway's characteristics are evaluated. These characteristics include; roadway configuration, right-of-way, traffic volume, carrying capacity, property access, speed limit, roadway spacing, and length of trips using the roadway.

The primary classifications used in classifying selected roadways of Perry City are: Interstate, Principle Arterial, Minor Arterial, Major Collector, Minor Collector and Local. An Arterial's function is to provide traffic mobility at higher speeds with limited property access. Traffic from the local roads is gathered by the Collector system, which provides a balance between mobility and property access trips. Local streets and roads serve property access based trips and these trips are generally shorter in length.

The Perry City area is accessed by US-91 to I-15. US-89 bisects the City North to South. US-91 travels east toward the Logan Valley. The functionally classified system is currently being revised statewide. The current functionally classified system generally defines the higher traffic roads, so only minor additions or changes will be required.



Figure 2-2: Existing State and Federal Routes Functional Classification



2.5 Bridges

There are two bridges on the state system located in the study area that could be eligible for federal bridge maintenance, rehabilitation, or replacement funds. Bridges are maintained and minor repairs made with maintenance funds. A bridge is rehabilitated or replaced as it deteriorates over time and as traffic volumes increase. (Figure 2-3 Bridge Sufficiency Rating)

Table 2-1 compares the bridges in the study area and identifies their sufficiency rating and location. Sufficiency rating indicates current condition of the structure with a rating of 100 showing a structure that is in excellent shape. A rating nearing 50 will reveal a structure that is in need of attention and is eligible for federal funding.

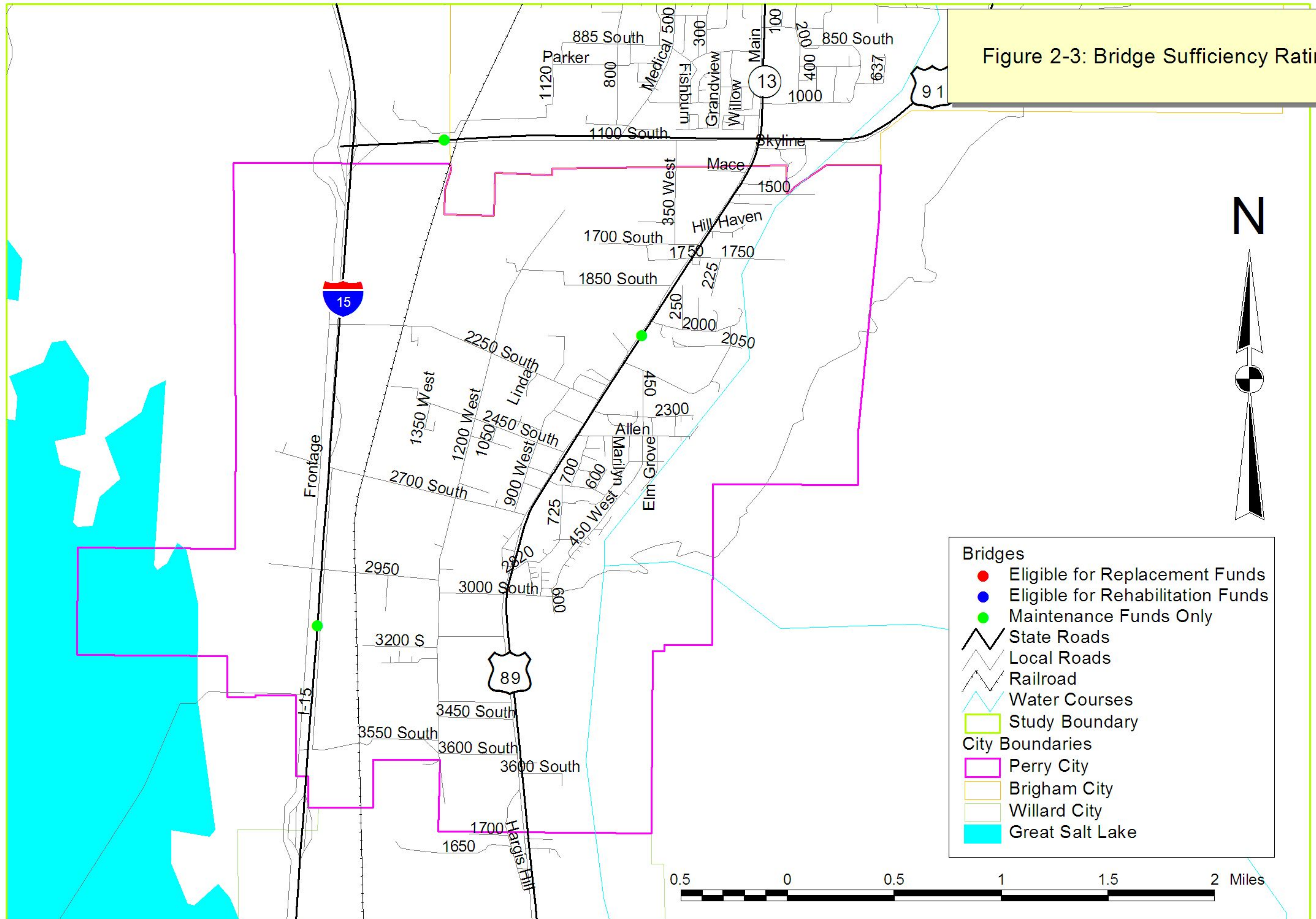
Table 2-1. Bridges

Number	Location	Maximum Span	No. Lanes & Road Width	Sidewalk	Sufficiency Rating
1-F205	I-15/Cannery Road (NBL)	24.4 M	2 Lanes 13.6 M	No	95.0
3 F-205	I-15/ Cannery Road (SBL)	24.4M	2 Lanes 13.6 M	No	95.0

Source: Utah Department of Transportation/Structures Division



Figure 2-3: Bridge Sufficiency Rating



2.6 Traffic Counts

Recent average daily traffic count data were obtained from UDOT. Table 2-2 shows the traffic count data on the key roadways of the study area. The number of vehicles in both directions that pass over a given segment of roadway in a 24-hour period is referred to as the average annual daily traffic (AADT) for that segment.

Table 2-2. Average Annual Daily Traffic

Road	Segment	Year	AADT
I-15	South Incorporated Limits Willard	2002	44,500
I-15	US-91 to US-89 Brigham City Interchange	2002	32,000
SR-89	South Incorporated Limits Perry	2002	12,000
SR-89	North Incorporated limits Perry /SR-89	2002	13,000

Source: Utah Department of Transportation

These are averages for the entire year. Perry City experiences a significant increase in traffic during the summer months. UDOT maintains 86 continuously operated automatic traffic recorders (ATR) throughout the state highway system. ATRs collect data continuously throughout the year in order to determine monthly, weekly, daily, and hourly traffic patterns. One ATR located in or near the study area on US-91. The following points summarize the 2003 data from the ATR at this location.

Traffic on US-91; 0.8 Miles North of SR-101, Wellsville @ MP 19.55

- August was the highest volume month.
- December was the lowest volume month.
- The highest daily volumes occurred on Friday.
- The lowest daily volumes occurred on Sunday.

The peak months of May and August are consistent with a recreational usage as well as traffic traveling through the area on their way to Utah State University in Logan.

The hourly traffic shows a clear average peak hour of around 3:00 TO 5:00 pm. This is consistent with an afternoon commuter peak.

A map illustrating existing and future traffic, and roadway capacities is presented in the Traffic Forecast section 3.2.

Chart 2-7 Monthly on US-91

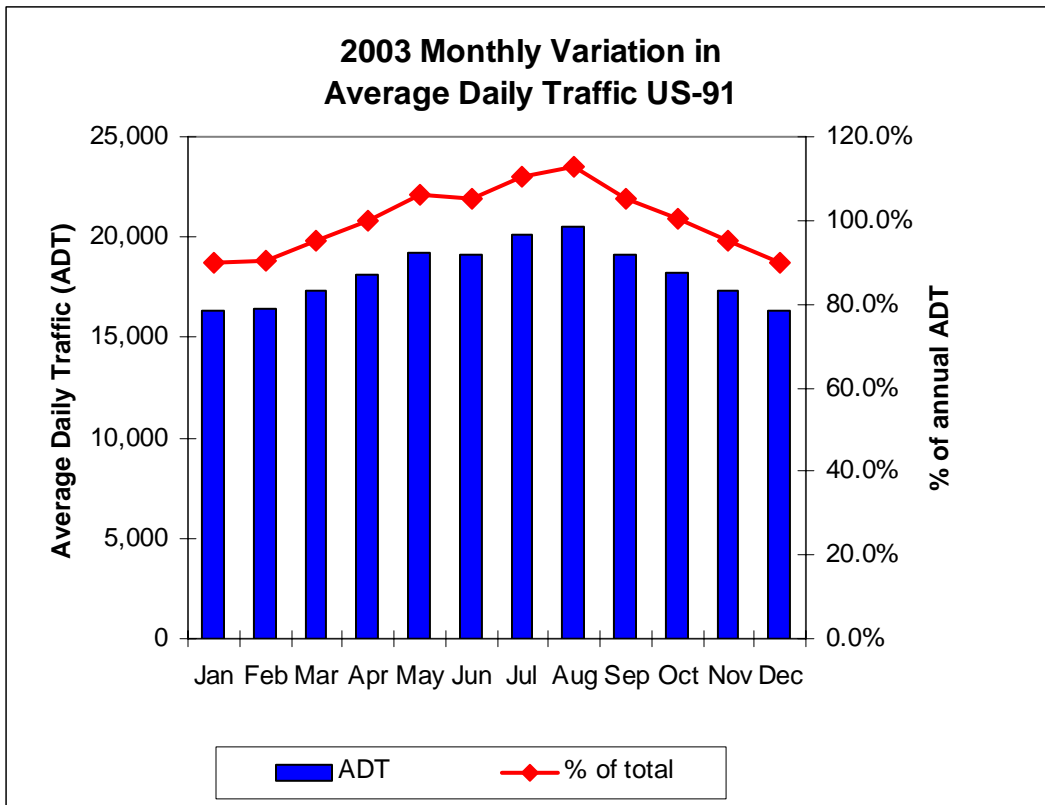
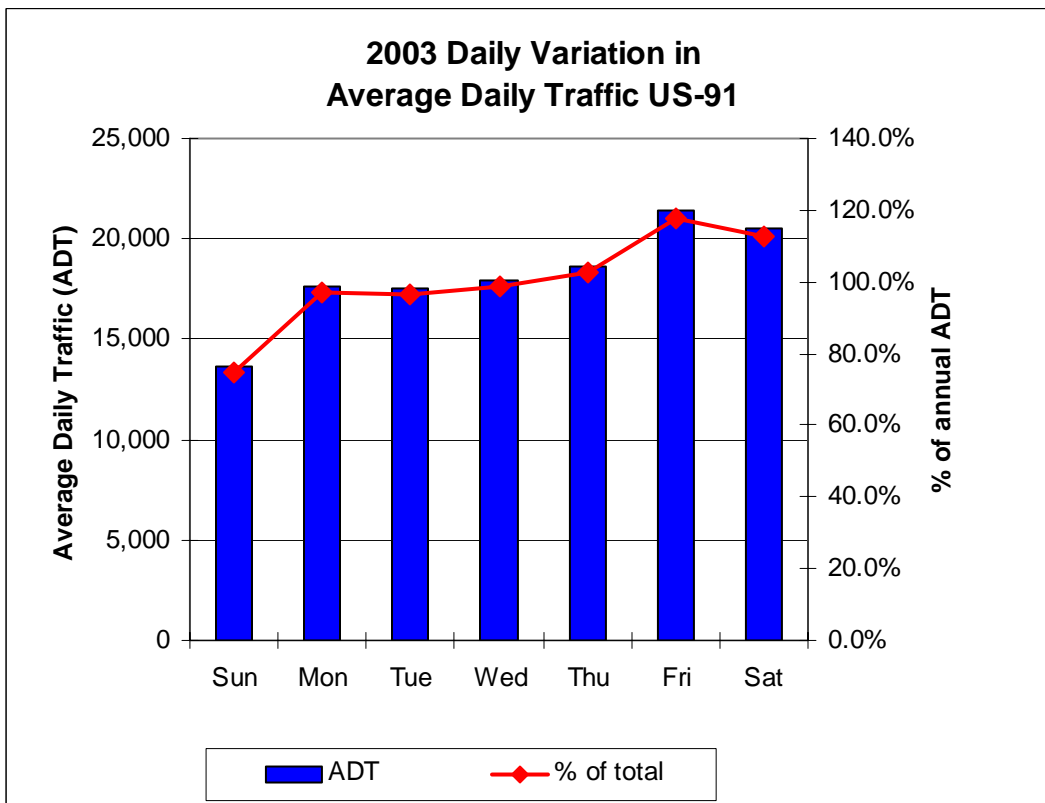
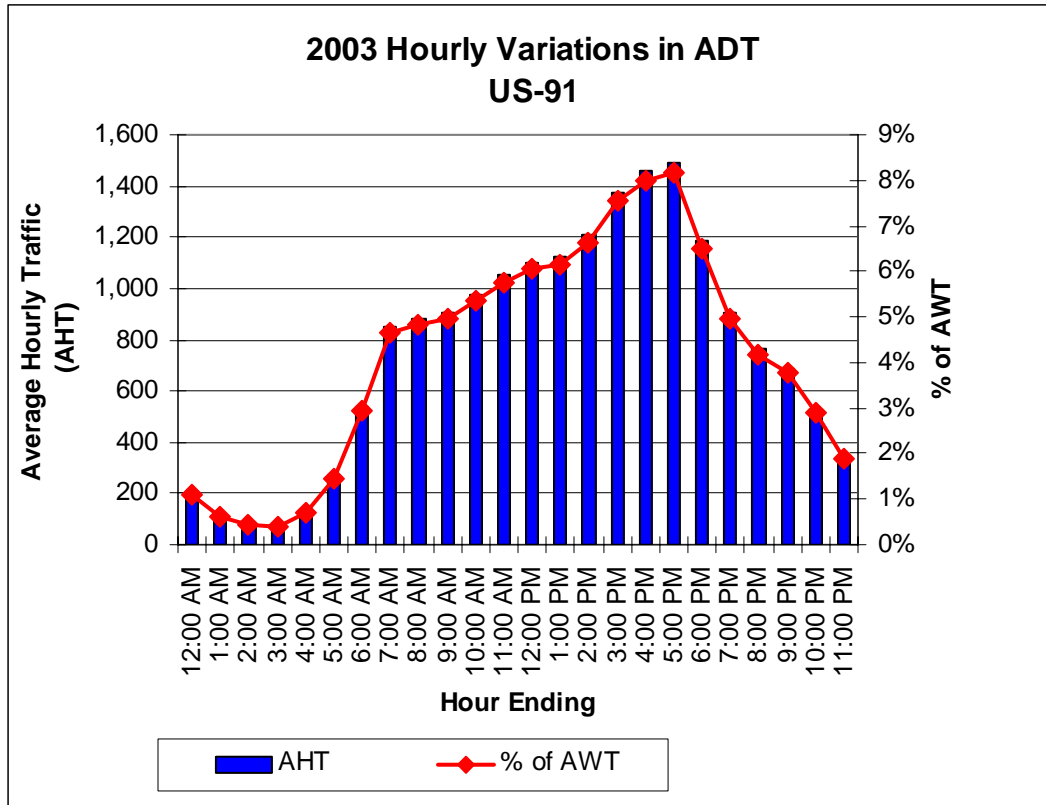


Chart 2-8 Daily ADT on US-91



Source: Utah Department of Transportation

Chart 2-9 Hourly Variation on US-91



Source: Utah Department of Transportation

2.7 Traffic Accidents

Traffic accident data was obtained from UDOT's database of reported accidents from 2002. Table 2-3 summarizes the accident statistics for those segments for the year 2002. Additional information includes the average daily traffic, the number of reported accidents, and the accident rates. The roadway segment accident rates were determined in terms of accidents per million vehicle miles traveled. The crash rates for each roadway segment are compared to the expected crash rate for similar facilities across the state.

Upon review of the accident data for the state system, there appears to be a higher than expected accident rate at the following location:

- On US-89 From 2500 South to 1850 South Perry.

The remainder of the state system shows a lower than expected accident rate. Figure 13 shows accident data taken from 1999-2001, which shows various segments of the state highway system and associated accident data.

Perry City may wish to review the accident history for the local street system to identify any specific accident hot spot locations.

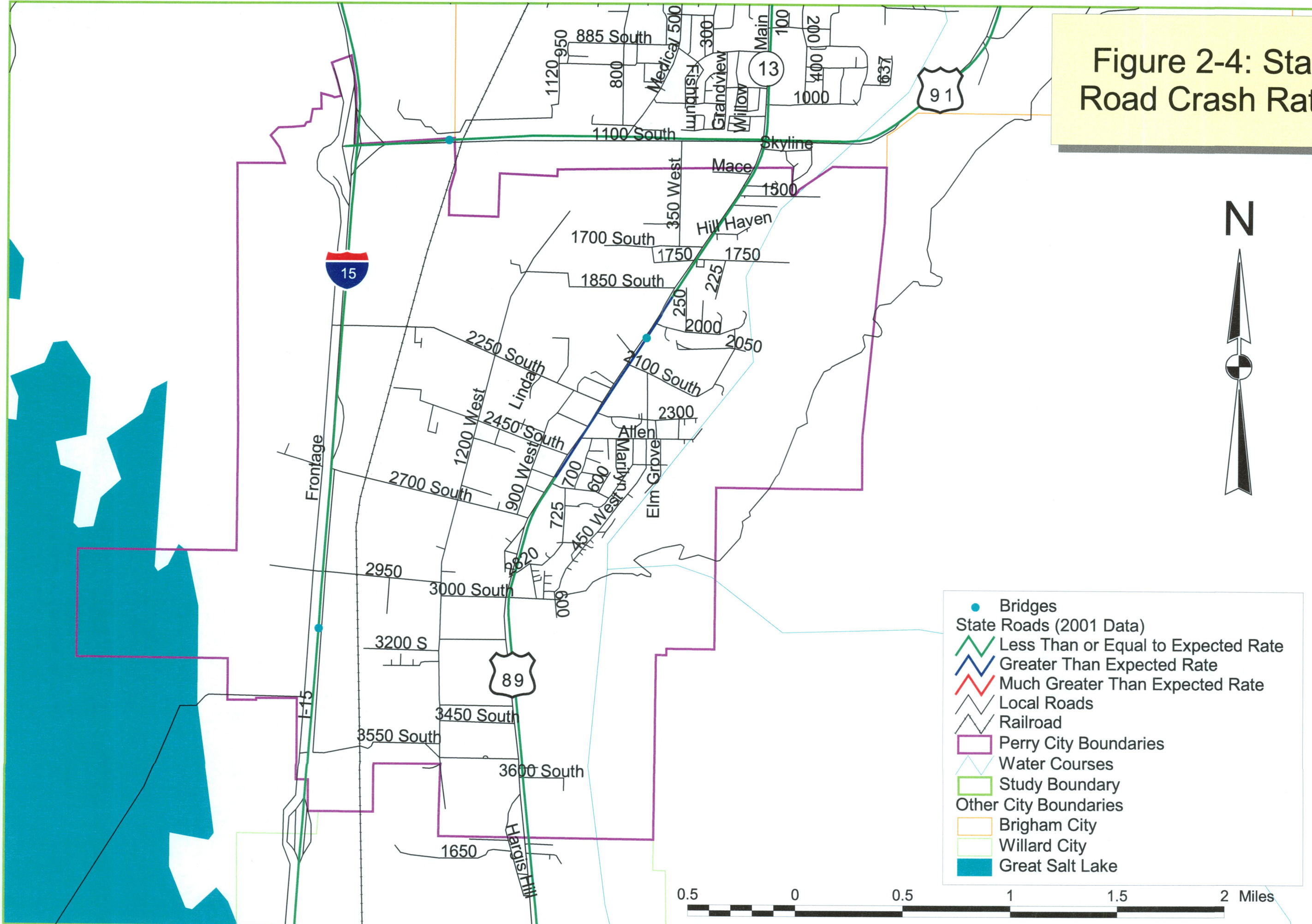
Table 2-3. Crash Data 2002

Road	From Milepost	End Milepost	ADT (2002)	# Crashes (2002)	Crash Rate	
					Actual	Expected*
SR-13	0	1.34	15965	37	3.70	3.80
I-15	357.93	362.26	44510	26	0.41	1.15
I-15	362.27	364	32046	6	0.31	1.00
US-89	369	371.12	11580	12	1.42	5.08
US-89	371.13	372.05	12620	8	2.00	5.08
US-89	372.06	374.62	12385	54	4.20	5.08
US-89	374.63	374.75	12995	8	15.10	5.08
US-91	0	1.35	18000	7	0.85	3.80
US-91	1.36	1.96	20315	5	1.45	4.50
US-91	1.97	3.82	14145	8	0.87	5.16
US-91	3.83	4	17085	3	2.63	3.80

* Statewide average accident rates for functional class and volume group.

Red indicates higher than expected rates of accidents

Figure 2-4: State Road Crash Rates



2.8 Bicycle and Pedestrian

The Federal Highway Administration recognizes the increasingly important role of bicycling and walking in creating a balanced, intermodal transportation system, and encourages state and local governments to incorporate all necessary provisions to accommodate bicycle and pedestrian traffic. In following this directive, Perry City is encouraged to adopt a “complete streets” philosophy that allows for the advancement of a transportation system for both motorized and non-motorized travel.

2.8.1 Biking/Trails

A grant made possible through the Marriner S. Eccles Foundation provided funding for a document titled the Perry City Trails Plan. Students and faculty of the Utah State University completed the document, with assistance from the community and other government agencies. The Plan details the history of Perry City and recognizes the advantages and problems that lie within the City’s boundaries. It includes statistical analysis to support development of a trails system, citing the physical, environmental, and preservation benefits, and also addresses trails costs and funding possibilities. There is community support within Perry City to develop a robust trails system.

In addition to the Perry City Trails Plan, the Governor’s Legacy Trails Initiative as included in the State’s Long Range Plan identifies a network of trails that would ensure access to trails/paths within 15 minutes of home and work for all Utahns. One of these Legacy Trails is the Bonneville Shoreline Trail that when completed will be a 113 mile trail that will run all along the Wasatch Front, including a section in close proximity to Perry City.

Perry City’s General Plan also recognizes the benefit to the community in the creation of bicycle and pedestrian paths. A number of specific areas and recommended trails and recreational facilities are referenced in the Perry City’s Trails Plan, as well as the need for corridor preservation in order to develop these future facilities. Also noted in the Plan is the need to address off-road vehicle riding in the foothill areas.

The City currently does not have dedicated bike lanes and inadequate shoulder width exists in a number of locations throughout the city’s roadways, which produces a less than desirable condition for bicycle travel.

2.8.2 Pedestrian

Perry City requires developers to install sidewalks in their developments. There have been a number of new developments taking place in recent years and all of these new subdivisions have sidewalks in place and in good condition. The sidewalks throughout the subdivided areas are well connected and this connectivity will be enhanced as more development takes place.

While the newer developments are equipped with sidewalks, there are some locations throughout the City that do not have sidewalk or they are incomplete and do not accommodate pedestrian traffic. The City has been able to install pockets of sidewalk along US-89 through UDOT’s Safe Sidewalk Program. However, these sections do not cover the entire length of the roadway and are only installed on one side of the street.

Although US-89 is a main highway, estimations are that only one-fourth of the road is equipped with sidewalk.

The City would like to improve conditions for pedestrians throughout the area. One suggested location for improvement is along 1200 West where it opens up to 1100 South. With the current growth and expected developments in this area, providing for pedestrian traffic along this route would increase safety and benefit the community.

2.9 Public Transportation

While Perry City does not have its own internal bus system, it is served by Utah Transit Authority bus route #630 that links Perry with Brigham City and Ogden. Bus #630 makes five stops in Perry, all of which are along the U.S. Highway 89 corridor, creating some problems associated with the parking of private vehicles along this busy highway.

The nearest intercity long-distance bus service is provided by Greyhound Lines in Ogden, while the nearest intercity rail passenger service is Amtrak's "California Zephyr," which operates daily with a stop in Salt Lake City en route from Chicago and Denver to the San Francisco Bay Area.

Scheduled airline service is available at the Salt Lake City International Airport.

2.10 Freight

Perry City is located on U.S. 89, which is a secondary highway freight route in northern Utah. Perry is also located adjacent to combined Interstate Highways 15 & 84, with access to those primary national freight routes via Exit 360 in Willard and Exit 364 in Brigham City. Union Pacific's secondary mainline between Ogden and Pocatello also passes along the west side of town near I-15/I-84.

At the present time, the only large industry requiring substantial truck transportation in Perry City is the Geneva Rock Quarry east of U.S. 89. However, the city has designated a large parcel of land on each side of I-15 and adjacent the Union Pacific for future development as a industrial area. The establishment of the Perry City Industrial Park will be largely contingent on addition of an interchange on I-15 where it presently crosses over Cannery Street on the west side of town. This new interchange would necessitate the relocation or removal of the Perry Rest Area on I-15, which is located just north of the proposed interchange site.

The primary freight issue in Perry City at this time is an on-going dispute with the trucking industry over trucks using U.S. 89 through town in order to by-pass the Perry Port-of-Entry on nearby I-15. This issue is particularly acute with gravel trucks serving the Ogden area from gravel pits in Brigham City.



2.11 Aviation Facilities & Operations

There is no airport in Perry City, however, the community is but a short distance from the Brigham City Airport and will benefit from future expansion plans for that facility.

At an elevation of 4226 feet above sea level, the Brigham City Airport is located three miles northwest of downtown Brigham City on State Route 13 next to the interchange with I-15/84. The airport is equipped with a single north/south runway #16/34, with a length of 7500 feet and a width of 100 feet. Paved with asphalt, runway 16/34 is equipped with pilot-activated runway lights while the airports airway beacon light is illuminated from dawn to dusk. While there is no control tower at Brigham City Airport, UNICOM and AWOS are available for pilots, as is a Non-directional electronic navigation beacon.

As the only airport in Box Elder County and one which serves a large area of northern Utah and southern Idaho, Brigham City has four Fixed-Base Operators (FBO), Airmotive Service, Mountain Air, The Flight Shop, and D & D Aircraft to handle aircraft fueling and maintenance needs. Both 100 octane aviation gasoline and Jet A fuel are available for general aviation and corporate business jet operations.

There is no commercial airline serving Brigham City with Salt Lake City International providing the nearest airline service. Air Cargo service into Brigham City is currently provided by charter carriers flying in automobile airbag components from the eastern United States to the Autoliv plant near downtown. Autoliv hopes that the proposed lengthening of runway 16/34 will allow larger DC-9 cargo jets to take over this operation, which is currently equipped with smaller, less efficient Lear and Falcon business-type aircraft.

Future plans for the Brigham City Airport include the proposed lengthening of runway 16/34 an additional 1400 feet at the north end to a total length of 8900 ft. This combined with widening the safety area paralleling the runway from 150 feet to 300 feet, along with increasing the runway's pavement thickness will allow larger corporate and cargo jet aircraft to operate to their full design capacity year-round into Brigham City. Additionally, the city is investigating the installation of a full Instrument Landing System (ILS) to replace the current GPS non-precision approach system to better accommodate those larger and faster jet aircraft. A paved parallel taxiway and additional parking ramp space are also being considered for the Brigham City Airport. Finally, as a highway safety issue, the entrance to the airport is to be relocated approx. 800 feet to the west of its current location on S.R. 13.

2.12 Revenue

Maintenance of existing transportation facilities and construction of new facilities come primarily from revenue sources that include the Perry City general fund, federal funds and State Class C funds.

Financing for local transportation projects consists of a combination of federal, state, and local revenues. However, this total is not entirely available for transportation improvement projects, since annual operating and maintenance costs must be deducted from the total revenue. In addition, the City is limited in their ability to subsidize the transportation budget from general fund revenues.

2.12.1 State Class B and C Program

The distribution of Class B and C Program monies is established by state legislation and is administered by the State Department of Transportation. Revenues for the program are

derived from State fuel taxes, registration fees, driver license fees, inspection fees, and transportation permits. Twenty-five percent of the funds derived from the taxes and fees are distributed to cities and counties for construction and maintenance programs.

Class B and C funds are allocated to each city and county by the following formula: 50% based on the population ratio of the local jurisdiction with the population of the State, 50% based on the ratio that the Class B roads weighted mileage within each county and the class C roads weighted mileage within each municipality bear to the total class B and Class C roads weighted mileage within the state. Weighted means the sum of the following: (i) paved roads multiplied by five; (ii) graveled road miles multiplied by two; and (iii) all other road types multiplied by one. (Utah Code 72-2-108) For more information go to UDOT's homepage @ www.udot.utah.gov, tab on "Doing Business" select the tab for "Local Government Assistance" here you will find the Regulations governing Class B&C funds

The table below identifies the ratio used to determine the amount of B and C funds allocated.

Apportionment Method of Class B and C Funds

Based on	Of
50%	Roadway Mileage *Based on Surface Type Classification (Weighted Measure) Pave Road (X 5) Graveled Road (X 2) Other Road (X 1)
50%	Total Population

Class B and C funds can be used for maintenance and construction of highways, however thirty percent of the funds must be used for construction or maintenance projects that exceed \$40,000. Class B and C funds can also be used for matching federal funds or to pay the principal, interest, premiums, and reserves for issued bonds.

Perry City received \$114,995.65 in 2003 for its Class C fund allocation.

2.12.2 Federal Funds

There are federal monies that are available to cities and counties through federal-aid program. The funds are administered by the Utah Department of Transportation. In order to be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP).

The Surface Transportation Program (STP) provides funding for any road that is functionally classified as a collector street or higher. STP funds can be used for a range of projects including rehabilitation and new construction. The Joint Highway Committee programs a portion of the STP funds for projects around the State for urban areas. A portion of the STP funds can be used in any area of the State, at the discretion of the State Transportation Commission.

Transportation Enhancement funds are allocated based on a competitive application process. The Transportation Enhancement Advisory Committee reviews the applications and then a portion of those are recommended to the State Transportation Commission for funding. Transportation enhancements include 12 categories ranging from historic preservation, bicycle and pedestrian facilities to water runoff mitigation. Other funds that are available are State Trails Funds, administered by the Division of Wildlife Resources.

The amount of money available for projects specifically in the study area varies each year depending on the planned projects in UDOT's Region One. As a result, federal aid program monies are not listed as part of the study area's transportation revenue.

2.12.3 Local Funds



Perry City, like most cities, has utilized general fund revenues in its transportation program. Other options available to improve the City's transportation facilities could involve some type of bonding arrangement, either through the creation of a redevelopment district or a special improvement district. These districts are organized for the purpose of funding a single, specific project that benefits an identifiable group of properties. Another source is through general obligation bonding arrangements for projects felt to be beneficial to the entire entity issuing the bonds.

2.12.4 Private Sources

Private interests often provide alternative funding for transportation improvements. Developers construct the local streets within the subdivisions and often dedicate right-of-way and participate in the construction of collector or arterial streets adjacent to their developments. Developers can be considered as an alternative source of funds for projects because of the impacts of the development, such as the need for traffic signals or street widening. Developers should be expected to mitigate certain impacts resulting from their developments. The need for improvements, such as traffic signals or street widening can be mitigated through direct construction or impact fees.

3. Future Conditions

3.1. Land Use and Growth

Perry City's Transportation Master Plan must be responsive to current and future needs of the area. The area's growth must be estimated and incorporated into the evaluation and analysis of future transportation needs. This is done by:

- Forecasting future population, employment, and land use;
- Projecting traffic demand;
- Forecasting roadway travel volumes;
- Evaluating transportation system impacts;
- Documenting transportation system needs; and
- Identifying improvements to meet those needs.

This chapter summarizes the population, employment, and land use projections developed for the project study area. Future traffic volumes for the major roadway segments are based on projections utilizing 20 years of traffic count history. The forecasted traffic data is then used to identify future deficiencies in the transportation system.

3.1.1 Population and Employment Forecasts

The Governor's Office of Planning and Budget develops population and employment projections. The current population and employment levels, as well as the future projections for each are shown for Perry and Box Elder County in the following table.

Population and Employment

Year	City	County	
	Population	Population	Employment
2000	2,383	42,745	19,311
2030	6,006	70,755	29,685

3.1.2 Future Land Use

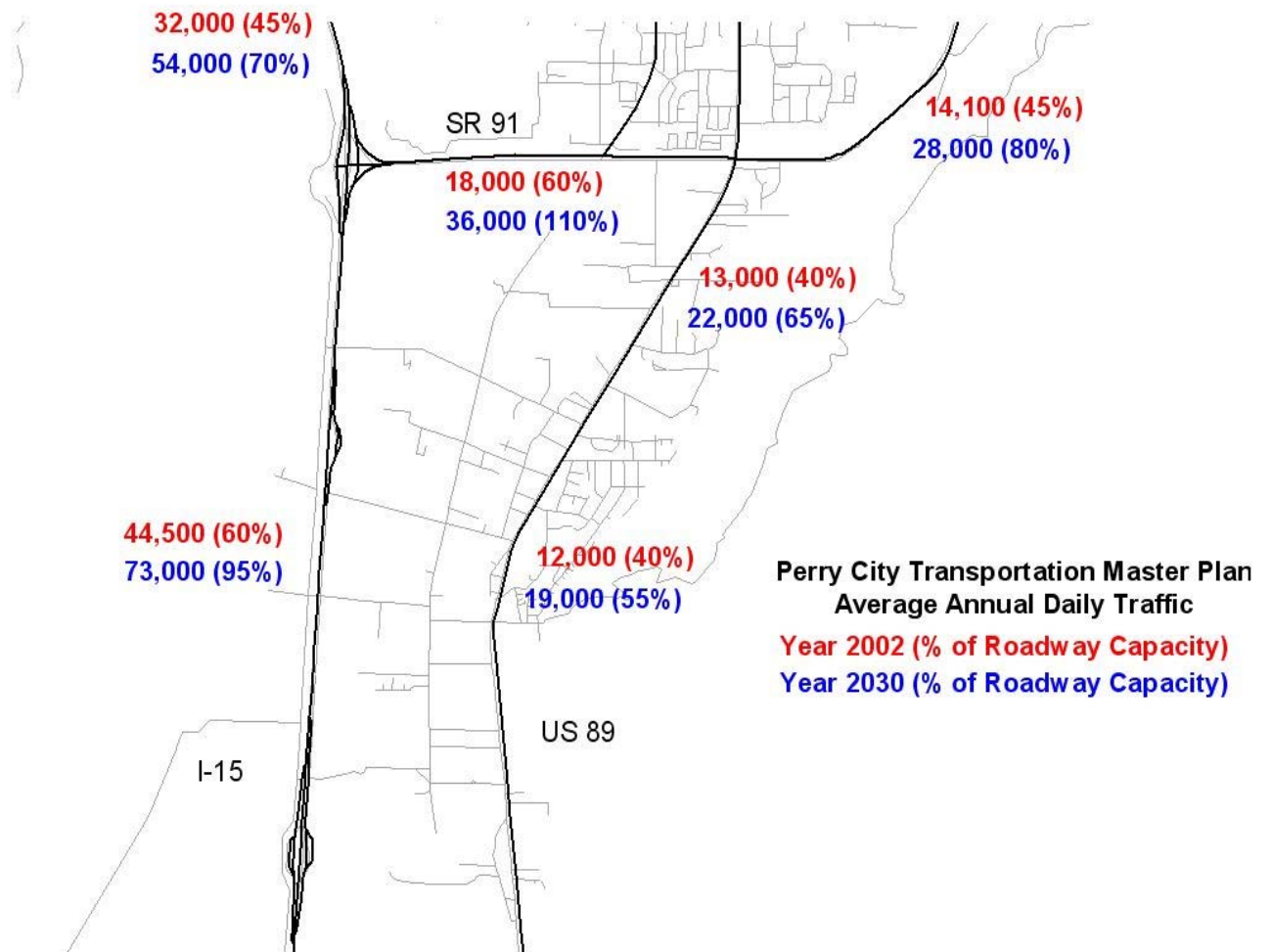
The City has an annexation plan that describes where it plans to grow. Some areas for developments were discussed during the course of the Transportation Master Plan. Updated Land Use documents can be found in the Perry City General Plan.

While specific development plans change with time, it is important to note possible areas of development within the Perry area. Commercial and industrial growth is also important in understanding transportation needs.

3.2 Traffic Forecast

Traffic in the Perry area is growing and will continue to grow. Although the population projections from the Governors Office of Planning and Budget show a 1.6% annual growth, traffic has historically grown at about 2% to 4%. It is estimated that traffic volumes in Perry will grow about 2.5% per year. On the fringes of town like SR 91 east of I-15, the potential for growth is greater so a 3.5% growth rate was assumed. Figure 3-1 shows average annual daily traffic for years 2002 and 2030. Also shown is the percentage of the roadway capacity the traffic will reach. The map illustrates that SR-91 could have capacity issues by the year 2030 if historical trends continue.

Figure 3-1 Average Annual Daily Traffic 2002; 2003

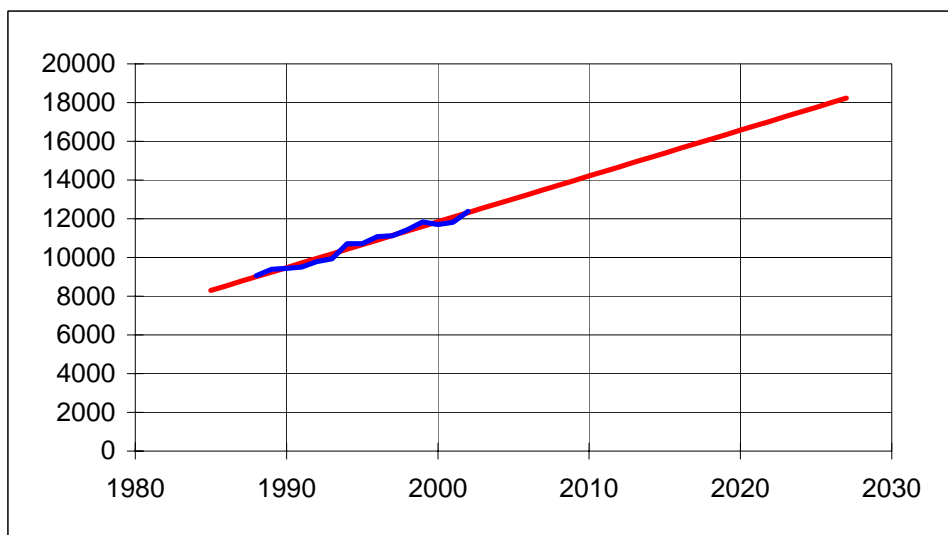




Route SR 89
 Limits Perry
Reference Post 374

Year	AADT	Forecast
1985		8296
1986		8532
1987		8769
1988	9065	9005
1989	9385	9242
1990	9430	9479
1991	9500	9715
1992	9785	9952
1993	9940	10188
1994	10715	10425
1995	10715	10661
1996	11080	10898
1997	11130	11134
1998	11430	11371
1999	11840	11608
2000	11705	11844
2001	11815	12081
2002	12385	12317
2003		12554
2004		12790
2005		13027
2006		13263
2007		13500
2008		13737
2009		13973
2010		14210
2011		14446
2012		14683
2013		14919
2014		15156
2015		15392
2016		15629
2017		15866
2018		16102
2019		16339
2020		16575
2021		16812
2022		17048
2023		17285
2024		17521
2025		17758
2026		17994
2027		18231

Projection based on 1988 to 2002 data
 2.0% growth rate → 237 vehicles/year



Notes

4.0 Planning Issues and Guidelines

Provided below is a discussion of various issues with a focus on elements that promote a safe and efficient transportation system in the future.

4.1 Guidelines and Policies

These guidelines address certain areas of concern that are applicable to Perry's Transportation Master Plan.

4.1.1 Access Management

This section will define and describe some of the aspects of Access Management for roadways and why it is so important. Access Management can make many of the roads in a system work better and operate more safely if properly implemented. There are many benefits to properly implemented access management. Some of the benefits follow:

- Reduction in traffic conflicts and accidents
- Reduced traffic congestion
- Preservation of traffic capacity and level of service
- Improved economic benefits businesses and service agencies
- Potential reductions in air pollution from vehicle exhausts

4.1.1.1 Definition

Access management is the process of comprehensive application of traffic engineering techniques in a manner that seeks to optimize highway system performance in terms of safety, capacity, and speed. Access Management is one tool of many that makes a traffic system work better with what is available.

4.1.1.2 Access Management Techniques

There are many techniques that can be used in access management. The most common techniques are signal spacing, street spacing, access spacing, and interchange to crossroad access spacing. There are various distances for each spacing, dependant upon the roadway type being accessed and the accessing roadway. UDOT has developed an access management program and more information can be gathered from the UDOT website and from the Access Management Program Coordinator.

4.1.1.3 Where to Use Access Management

Access Management can be used on any roadway. In some cases, such as State Highways, access management is a requirement. Access management can be used as an inexpensive way to improve performance on a major roadway that is increasing in volume. Access management should be used on new roadways and roadways that are to be improved so as to prolong the usefulness of the roadway.

4.1.2 Context Sensitive Solutions

Context Sensitive Solutions (CSS) addresses the need, purpose, safety and service of a transportation project, as well as the protection of scenic, aesthetic, historic, environmental and other community values. CSS is an approach to transportation solutions that find, recognize and incorporate issues/factors that are part of the larger

context such as the physical, social, economic, political and cultural impacts. When this approach is used in a project the project become better for all of the entities involved.

4.1.3 Recommended Roadway Cross Sections

Cross sections are the combination of the individual design elements that constitute the design of the roadway. Cross section elements include the pavement surface for driving and parking lanes, curb and gutter, sidewalks and additional buffer/landscape areas. Right-of-way is the total land area needed to provide for the cross section elements. Suggested types of cross-section are shown in Figure 4-1.

The design of the individual roadway elements depends on the intended use of the facility. Roads with higher design volumes and speeds need more travel lanes and wider right-of-way than low volume, low speed roads. The high use roadway type should include wider shoulders and medians, separate turn lanes, dedicated bicycle lanes, elimination of on street parking, and control of driveway access. For most roadways, an additional buffer area is provided beyond the curb line. This buffer area accommodates the sidewalk area, landscaping, and local utilities. Locating the utilities outside the traveled way minimizes traffic disruption in utility repairs or when changes in service are needed.

Federal Highway standard widths apply on the all roads that are part of the state highway system. Also, all federally funded roadways in Perry City and Box Elder County must adhere to the same standards for widths and design.

4.2 Bicycles and Pedestrians

4.2.1 Bicycles/Trails

Bicycles are allowed on all roadways, except where legally prohibited, and as such should be a consideration on all roads that are being designed and constructed, and as roadway improvements are taking place. To increase the level of interest in bicycling in the Perry City area, the City should encourage developers to include separate bicycle/pedestrian pathways in all new developments. Opportunities to include bike lanes and increased shoulder width in conjunction with a roadway project should be taken whenever technically, environmentally, and financially feasible. The City is encouraged to follow the recommendations laid out in the Perry City Trails Study and work towards development of the trails system as referenced in Chapter 2 of this Transportation Master Plan.

It is important to note that regardless of the system's function, as the bike/trail facilities are planned, designed and constructed, the City should review the connectivity of the trails systems. With input from the community, a review of the connectivity of the trails should play an integral role in the decision making process for potential projects. In order to enhance the quality of life for those in the community, the trails should be accessible to all users and incorporate ADA requirements.

The trails, when constructed, may have slight variances in application type due to possible differences in the terrain at a specific trail location or differing user needs. However, regardless of the design type, the applicable design standards found in the latest version of the AASHTO Guide for the Development of Bicycle Facilities

should be followed, as well as the Manual on Uniform Traffic Control Devices (MUTCD) guidelines for appropriate signage of the trails system.

As stated in the City's General Plan and referenced in Chapter 2 of this document, there is a problem with off-road vehicle riding in the foothills, creating safety concerns and problems within the community. The City may want to pursue a more in-depth study to address these specific locations and make recommendations for a solution.

4.2.2 Pedestrians

Every effort should be made to accommodate pedestrians throughout Perry City. An opportunity to include accessible sidewalks, while adhering to ADA requirements, during construction of other projects is encouraged. For the safety and convenience of pedestrian traffic, sidewalk placement should be free from debris and obstructions or impediments such as utility poles, trees, bushes, etc. The City should conduct a sidewalk



inventory to document locations where there may be gaps or safety concerns in the sidewalk system. Effort should then be made to construct and complete the sidewalks where gaps or problems occur. The City will continue to require developers to include sidewalk placement or improvements in their respective project plans. The interconnectedness of the City's sidewalk system should be considered as development takes place.

Sidewalks in residential areas should be at least 5-feet wide whenever adequate right-of-way can be secured. This will provide sufficient room and a level of comfort to persons walking in pairs or passing and will specifically allow for persons with strollers or in wheelchairs to pass. On major roadways, sidewalks at least 6-feet wide and with a 6 to 10-foot park strip are desirable. In pedestrian-focused areas, such as schools, parks, sports venues or theaters, and in hotel and market districts, even wider sidewalks are recommended to accommodate and encourage a higher level of pedestrian activity, especially where tourist use would be expected. To ensure consistency of sidewalks throughout the area, UDOT's approved standard for sidewalks should be followed.

As mentioned in Chapter 2 of this Plan, the City has been able to provide additional sidewalk placement with funding made available through the Utah Department of Transportation's Safe Sidewalk Program. UDOT's Traffic and Safety Division administers the program and Perry City should continue to pursue this avenue as a resource to install sidewalks in areas of need. Program application information is available by contacting the UDOT Region One office.

The City should be aware of, and coordinate with, the area schools that are tasked with developing a routing plan to provide a safe route to school. The routing plan is to be reviewed and updated annually. Information regarding the Safe Routes to School program is available by contacting the Utah Department of Transportation's Traffic and Safety Division.

4.3 Enhancements Program

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) created the Transportation Enhancement program. The program has since been reauthorized in subsequent bills (i.e. TEA-21). The Transportation Enhancement program provides opportunities to use federal dollars to enhance the cultural and environmental value of the transportation system. These transportation enhancements are defined as follows by TEA-21:

The term 'transportation enhancement activities' means, with respect to any project or the area to be served by the project, any of the following activities if such activity relates to surface transportation: provision of facilities for pedestrians and bicycles, provision of safety and educational activities for pedestrians and bicyclists, acquisition of scenic easements and scenic or historic sites, scenic or historic highway programs (including the provision of tourist and welcome center facilities), landscaping and other scenic beautification, historic preservation, rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals), preservation of abandoned railway corridors (including the conservation and use thereof for pedestrian or bicycle trails), control and removal of outdoor advertising, archeological planning and research, environmental mitigation to address water pollution due to highway runoff or reduce vehicle caused wildlife mortality while maintaining habitat connectivity, and establishment of transportation museums.

The Utah Transportation Commission, with the help of an advisory committee, decides which projects will be programmed and placed on the Statewide Transportation Improvement Program (STIP). Applications are accepted in an annual cycle for the limited funds available to UDOT for such projects. Information and Applications for the current cycle can be found on UDOT's homepage @ www.udot.utah.gov, tab on "Doing Business" select "Planning and Programming", here you will find a sub-topic entitled "Transportation Enhancement Program". Applications must be received by the UDOT Program Development Office, on or before the specified date to be considered. Projects will compete on a statewide basis.

4.4 Transportation Corridor Preservation

Transportation Corridor Preservation will be introduced as a method of helping Perry's Transportation Master Plan. This section will define what Corridor Preservation is and ways to use it to help the Transportation Master Plan succeed for the City.

4.4.1 Definition

Transportation Corridor Preservation is the reserving of land for use in building roadways that will function now and can be expanded at a later date. It is a planning tool that will reduce future hardships on the public and the city. The land along the

corridor is protected for building the roadway and maintaining the right-of-way for future expansion by a variety of methods, some of which will be discussed here.

4.4.2 Corridor Preservation Techniques

There are three main ways that a transportation corridor can be preserved. The three ways are acquisition, police powers, and voluntary agreements and government inducements. Under each of these are many sub-categories. The main methods will be discussed here, with a listing of some of the sub-categories.

4.4.2.1 Acquisition

One way to preserve a transportation corridor is to acquire the property outright. The property acquired can be developed or undeveloped. When the city is able to acquire undeveloped property, the city has the ability to build without greatly impacting the public. On the other hand, acquiring developed land can be very expensive and can create a negative image for the City. Acquisition of land should be the last resort in any of the cases for Transportation Corridor Preservation. The following is a list of some ways that land can be acquired.

- Development Easements
- Public Land Exchanges
- Private Land Trusts
- Advance Purchase and Eminent Domain
- Hardship Acquisition
- Purchase Options

4.4.2.2 Exercise of Police Powers

Police powers are those ordinances that are enacted by a municipality in order to control some of the aspects of the community. There are ordinances that can be helpful in preserving corridors for the Transportation Master Plan. Many of the ordinances that can be used for corridor preservation are for future developments in the community. These can be controversial, but can be initially less intrusive.

- Impact Fees and Exactions
- Setback Ordinances
- Official Maps or Maps of Reservation
- Adequate Public Facilities and Concurrency Requirements

4.4.2.3 Voluntary Agreements and Governmental Inducements

Voluntary agreements and governmental inducements rely on the good will of both the developers and the municipality. Many times it is a give and take situation where both parties could benefit in the end. The developer will likely have a better-developed area and the municipality will be able to preserve the corridor for transportation in and around the development. Listed below are some of the voluntary agreements and governmental inducements that can be used in order to preserve transportation corridors in the city limits.

- Voluntary Platting
- Transfer of Development Rights
- Tax Abatement

- Agricultural Zoning

Each of these methods has its place, but there is an order that any government should try to use. Voluntary agreements and government inducements should be used, if possible, before any police powers are used. Police powers should be tried before acquisition is sought. UDOT has developed a toolkit to aid in corridor preservation techniques. This toolkit contains references to Utah code and examples of how the techniques have been used in the past.

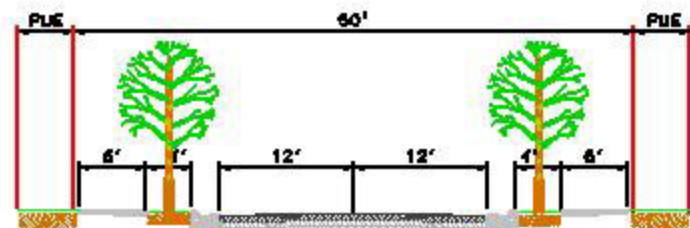
4.5 Sight Distance



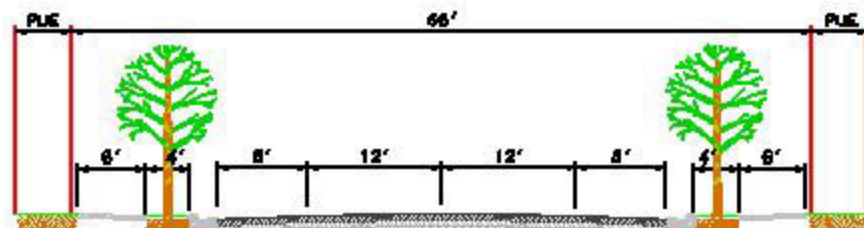
Sight distance at street corners is an important part of the safety requirements for any transportation plan in the City. Perry City has in its City Ordinances a regulation to limit fence height on corner properties to ensure a safe sight distance triangle at the intersections. Ordinance 00-01 FENCE STANDARDS & REGULATIONS covers the fencing requirements and sight triangle diagram. Currently, there is a new fence ordinance that is being considered within Perry City. The

proposed ordinance limits fence heights to three feet in the front setback area of the property, which will provide for a safer sight distance from driveways. The new proposed ordinance also requires fences on corner lots to be placed ten feet back from the property line on the street side yard or reduced to three feet in height.

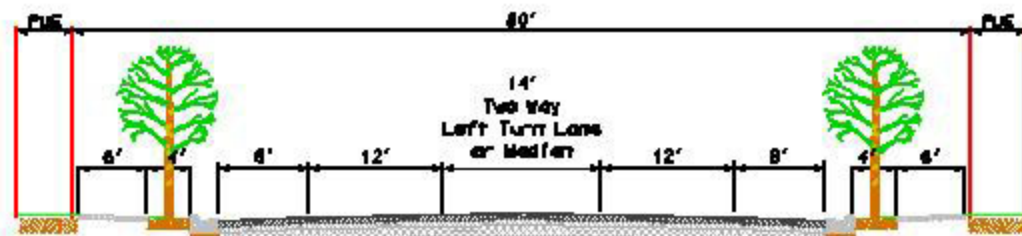
Ordinance 96-13, Article I, Section 21-6 and Section 21-14 cover general obstructions, weeds, garbage, etc. to and near sidewalks and roadways and the removal of said items. This ordinance allows for the removal of said items and where the cost of such removal lies. These ordinances allow for better sight distances along street and near intersections and will increase the overall safety of intersections throughout the City.



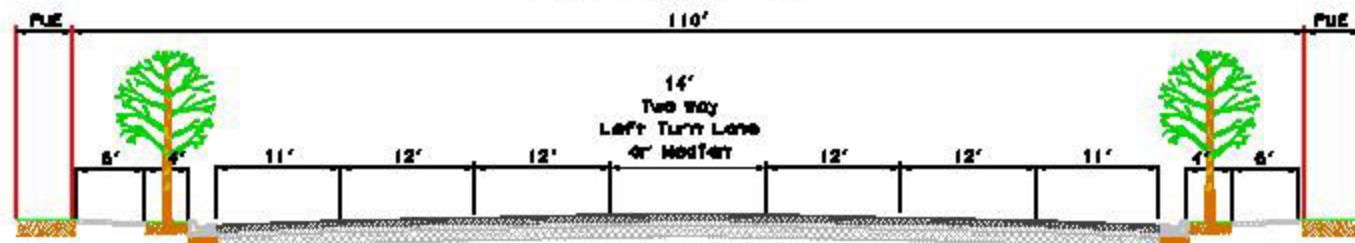
Two-Lane Cross Section
24 feet MAXIMUM ASPHALT WIDTH



Two Lane Cross Section
With Shoulders
Spaced between Arterials



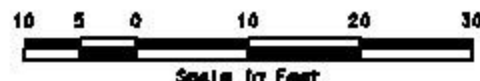
Three Lane Cross Section
With Shoulder
Spaced between Arterials



Five Lane Cross Section
With Shoulders
Minimum spacing approximately 1/4 mile

Notes:

1. Shoulder Dimension varies from 4' to 8' (See UDOT Std. Dev. 011 Note 3)
2. Public Utility Easement (PUE) dimension varies from 2.5' to 12' Typical
3. Shoulder Dimensions:
on 60' ROW - varies from 8' to 12'
on 110' ROW - varies from 10' to 12'
See AASHTO & Policy on Geometric Design of Highways and Streets



**Suggested
Typical Cross Section**

Revised: September 16, 2004

5. Transportation Improvement Projects

5.1 Current Statewide Transportation Improvement Program (2004-2008 STIP)

At the present time there are several projects under consideration and investigation in the Perry City area. Currently in the STIP there are the following Projects:

- Spot Improvement-Turning Lanes at US-89 and 2000 South, US-89 and 2250 South & US-89 and 3000 South (Completed 2004).

Also, these projects are currently listed on the State of Utah's Long Range Plan, Utah Transportation 2030:

- Reconstruction of Interchange at I-15 and US-91
- Construction of New Brigham City Rest Area (Welcome Center)

5.2 Recommended Projects

The following list identifies the eight projects that have been identified as having the highest priority to the Perry City Transportation Advisory Committee. These needs were identified through a series of meetings where the TAC identified the needs and set priorities for projects.

- Pedestrian access across US-89, either an Underpass or Overpass, at 2450 South
- New Interchange at I-15 and 2950 South (Cannery Road)
- Curb, Gutter and Sidewalk along US-89 in front of Paul's Patch Nursery & Maddox Restaurant.
- Traffic Signal at US-89 and 2700 South
- Deceleration Lane at US-89 and 2700 South – Southbound lane
- Traffic Signal at the Southbound Off Ramp of I-15 and US-91
- Add a Left Turn Only Signal at US-91 and 500 West
- An Access Management Study along US-89 throughout Perry City limits.

Additionally, many concerns and issues were identified which are found on the attached list.

Transportation Needs and Cost Estimates

		Project Description / Concept			Length or Quantity	Estimated Project Unit Cost	Estimated Cost
County	Route	State Highway Projects (LRP)	Start Point	End Point			
Box Elder	US-89	2700 South / US-89 Deceleration Lanes				\$100,000	\$100,000
Box Elder	US-89	3600 South / US-89 Deceleration Lanes				\$100,000	\$100,000
Box Elder	US-89/US-9	US-89 / 1100 South (US-91) interchange				\$20,000,000	\$20,000,000
Box Elder	I-15	I-15 / 2950 South interchange				\$12,500,000	\$12,500,000
Box Elder	I-15	I-15 / 1100 South (US-91) Interchange				\$25,000,000	\$25,000,000
Box Elder	US-89	Islands for access management along US-89	So. of Perry	No. of Perry		\$750,000	\$750,000
Box Elder	US-89	Roundabout 3000 South / US-89				\$300,000	\$300,000
		State Highway Projects (Operational)					
Box Elder	US-89	Left turn safety at 2450 South / US-89				\$50,000	\$50,000
Box Elder	US-89	Curb, gutter, sidewalk at Maddox			1000 feet	\$75,000	\$75,000
Box Elder	US-89	Curb, gutter, sidewalk at movie theater complex			500 feet	\$40,000	\$40,000
		Local Highway Projects					
Box Elder		1200 West curb, gutter & sidewalk including bike trail	So. of Perry	No. of Perry	3 Miles	\$1,000,000	\$1,000,000
Box Elder		East side connector road	So. of Perry	No. of Perry	3.4 Miles	\$3,000,000	\$3,000,000
Box Elder		Gateway feature into Perry	No. of Perry			\$150,000	\$150,000
Box Elder		1200 West / 2700 South parking restrictions				\$5,000	\$5,000
Box Elder		1400 South rebuild	US-89	End of road		\$100,000	\$100,000
Box Elder		2450 South rebuild	1050 West	Park Drive		\$75,000	\$75,000
Box Elder		2250 South rebuild	Park Drive	1200 West		\$150,000	\$150,000
Box Elder		1500 South rebuild	US-89	End of road		\$75,000	\$75,000
Box Elder		400 West new road	2100 South	2300 South		\$50,000	\$50,000
Box Elder		2250 South rebuild	1200 West	East Frontage Rd.		\$250,000	\$250,000
		Pedestrian/ Bicycle Projects					
Box Elder	US-89	Bike Trail along US-89	So. of Perry	No. of Perry	3.1 Miles	\$315,000	\$315,000
Box Elder	US-89	Access across US-89 at 2450 South (Either Over/Underpass)				\$1,250,000	\$1,250,000
		Traffic Signals (ITS)					
Box Elder	US-89	2700 South / US-89 traffic signal				\$150,000	\$150,000
Box Elder	US-89	2000 South / US-89 traffic signal				\$150,000	\$150,000
Box Elder	US-91	500 West / 1100 South (US-91) left turning signal				\$25,000	\$25,000
Box Elder	I-15/ US-91	Southbound offramp I-15 / 1100 South (US-91) traffic signal				\$150,000	\$150,000
		Freight					
Box Elder		Lights and arms for at-grade rail crossing located at 2250 South				\$200,000	\$200,000
Box Elder		Lights and arms for at-grade rail crossing located at 2700 South				\$200,000	\$200,000
Box Elder		Lights and arms for at-grade rail crossing located at 2950 South				\$200,000	\$200,000
Box Elder		Lights and arms for at-grade rail crossing located at 3550 South				\$200,000	\$200,000
Box Elder		Relocate, New Port of Entry				\$75,000,000	\$75,000,000
		Alternative Travel Modes					
Box Elder		Intermodal Hub (Bus, Rail, Pedestrian & Automobile)				\$50,000,000	\$50,000,000
		Studies					
Box Elder		Commuter Rail Study				\$100,000	\$100,000
Box Elder	US-89	US-89 speed limits Study				\$5,000	\$5,000
Box Elder	US-89	US-89 truck traffic Study				\$50,000	\$50,000
Box Elder		Safe routes to school study				\$10,000	\$10,000
Box Elder		1200 West speed limits Study				\$10,000	\$10,000
Box Elder		Access Management Study (Citywide)				\$50,000	\$50,000
Estimated Total Needs Costs							\$191,835,000

5.3 Revenue Summary

5.3.1 Federal and State Participation

Federal and State participation is important for the success of implementing these projects. UDOT needs to see the Transportation Master Plan so that they understand what the City wants to do within its transportation system. UDOT can then weigh the priorities of the city against the priorities of rest of the state. It is important for Perry City to promote projects that can be placed on UDOT's five-year Statewide Transportation Improvement



Program (STIP) as soon as possible. The process for placing projects into the STIP and funding of these projects can be found at UDOT's homepage @ www.udot.utah.gov, tab on "Doing Business" select the tab for "Planning and Programming" here there is a subtopic entitled "Statewide Transportation Improvement Program (STIP)" that describes this program in detail. Additionally coordination with UDOT's Region Director and Planning Engineer will be practical.

5.3.2 City Participation

The City will fund the local Perry City projects. The local match component and partnering opportunities vary by the funding source.

5.4 Other Potential Funding

Previous sections of this chapter show significant shortfalls projected for the short-range and long-range programs. The following options may be available to help offset all or part of the anticipated shortfalls:

- Increased transportation impact fees.
- Increased general fund allocation to transportation projects.
- General obligation bonds repaid with property tax levies.
- Increased participation by developers, including cooperative programs and incentives.
- Special improvement districts (SIDs), whereby adjacent property owners are assessed portions of the project cost.
- Sales or other tax increase.
- State funding for improvements on the county roadway system.
- Increased gas tax, which would have to be approved by the State Legislature.
- Federal-aid available under one of the programs provided in the federal transportation bill (TEA-21 is the current bill; SAFETEA will likely be passed in late 2004).

Increased general fund allocation means that General Funds must be diverted from other governmental services and/or programs. General obligation bonds provide initial capital for

transportation improvement projects but add to the debt service of the governmental agency. One way to avoid increased taxes needed to retire the debt is to sell bonds repaid with a portion of the municipalities' State Class monies for a certain number of years.

Participation by private developers provides a promising funding mechanism for new projects. Developers can contribute to transportation projects by constructing on-site improvements along their site frontage and by paying development fees. Municipalities commonly require developers to dedicate right-of-way and widen streets along the site frontage. A negative side of the on-site improvements is that the streets are improved in pieces. If there are not several developers adjacent to one another at the same time, a continuous improved road is not provided. One way to overcome this problem is for the jurisdiction to construct the street and charge the developers their share when they develop their property.

Another way developers can participate is through development fees. The fees would be based on the additional improvements required to accommodate the new development and would be proportioned among each development. The expenditure of additional funds provided by the fees would be subject to the City's spending limit. However, development fees are often a controversial issue and may or may not be an appropriate method of funding projects.

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